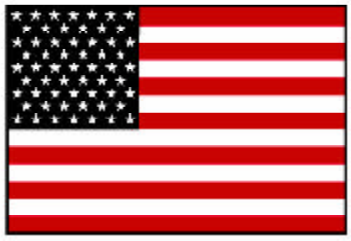
U.S. Department
of Transportation
**Federal Aviation
Administration**

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR
43–16A

AVIATION MAINTENANCE ALERTS



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NUMBER
298

MAY
2003

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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC 20590

AVIATION MAINTENANCE ALERTS

The Aviation Maintenance Alerts provide a common communication channel through which the aviation community can economically interchange service experience and thereby cooperate in the improvement of aeronautical product durability, reliability, and safety. This publication is prepared from information submitted by those who operate and maintain civil aeronautical products. The contents include items that have been reported as significant, but which have not been evaluated fully by the time the material went to press. As additional facts such as cause and corrective action are identified, the data will be published in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported via Malfunction or Defect Reports. Your comments and suggestions for improvement are always welcome. Send to: FAA; ATTN: Aviation Data Systems Branch (AFS-620); P.O. Box 25082; Oklahoma City, OK 73125-5029.

UNAPPROVED PARTS NOTIFICATION

UPN NO. 2003-00142

UNAPPROVED PARTS
NOTIFICATION

SUSPECTED UNAPPROVED PARTS PROGRAM OFFICE, AVR-20
13873 PARK CENTER ROAD, SUITE 165
HERNDON, VA 20171

No. 2003-00142
March 31, 2003

UPNs are posted on the Internet at http://www.faa.gov/avr/sups/upn.cfm

Published by: FAA, AIR-140, P.O. Box 26460, Oklahoma City, OK 73125

AFFECTED PRODUCTS
All propellers maintained, altered, or approved for return to service by T and W Propellers, Inc. (Chino, CA).

PURPOSE
The purpose of this notification is to advise all aircraft owners, operators, manufacturers, maintenance organizations, and parts distributors regarding propellers maintained by T and W Propellers, Inc. (T and W), 7000 Merrill Avenue, Building E3, #50, Chino, CA 91710. T and W previously held Air Agency Certificate No. T6WR776N.

BACKGROUND
Information received during a Federal Aviation Administration (FAA) accident investigation revealed that T and W had failed to accomplish maintenance in accordance with the manufacturers' maintenance manuals (such as Hartzell Manual 133C, Hartzell Manual 202A, and Hartzell Service Bulletin 136H) or FAA-approved procedures. Improper procedures included failure to perform nondestructive inspections in accordance with FAA-approved procedures. Evidence indicated that T and W installed incorrect hardware and may have falsified work orders and other documentation associated with approving the

propellers for return to service. The FAA has been unable to determine the exact time span during which the improper maintenance occurred. Therefore, all propellers that T and W maintained or approved for return to service from approximately 1997 until 2003 are suspect.

RECOMMENDATION
Regulations require that type-certificated products conform to their type design and be properly maintained using current data, required equipment, and appropriately trained personnel. Aircraft owners, operators, maintenance organizations, and parts distributors should inspect their aircraft, aircraft records, and/or parts inventories for any propeller work accomplished by T and W. If any propellers are installed on aircraft, appropriate action should be taken. If any propellers are found in existing inventory, it is recommended that the propellers be quarantined to prevent installation until a determination can be made regarding each propeller's eligibility for installation.

FURTHER INFORMATION
Further information concerning this investigation may be obtained from the FAA Flight Standards District Office (FSDO) given below. The FAA would appreciate any information concerning the discovery of the above-referenced propellers from any source, the means used to identify the source, and the action taken to remove the propellers from service.

This notice originated from the Riverside FSDO, 6961 Flight Road, Riverside, CA 92504, telephone (909) 276-6701, fax (909) 689-4309; and was published through the FAA Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 668-3720, fax (703) 481-3002.

AIRPLANES

AMERICAN CHAMPION

American Champion Aircraft Corp.; Models 7, 8, and 11; Rudder Control; ATA 2720

An American Champion Aircraft Corporation (ACAC) 7KCAB lost rudder control and departed the runway.

An investigation determined that the rudder pulley assembly, located in the baggage compartment, was missing the pulley guard. The rudder cable dislodged from the pulley, relieving cable tension, and resulted in a loss of rudder control. Further investigation revealed numerous Service Difficulty Reports (SDR) that indicated these and other control-system pulleys might seize causing the control cables to deteriorate and become unserviceable. The majority of the SDRs also reported frayed flap-control cables running over the upper pulleys located in the wing root.

The maintenance manual requires a 100-hour inspection of the control system. Inspectors performing annual/100-hour inspections need to ensure the aircraft is being operated in accordance with an approved type design and place special emphasis in the critical fatigue areas of the control system as established in AC 43.13-1B, Acceptable Methods, Techniques, and Practices - Aircraft Inspection and Repair.

BEECH

Beech; Model 400A; Beechjet; Landing Gear Brake System; ATA 3240

The technician received a complaint of unlocked gear indication after gear retraction. He conducted an investigation and discovered the right main landing gear (MLG) was not fully locking in the retracted position due to interference between the strut assembly, brake line clamp (P/N 901-406-3-4A), and adjacent structure. After he repositioned the clamp, the landing gear retraction test was satisfactory.

According to the submitter, the Beech 400A MLG wheel wells are a relatively tight fit. He recommended performing a gear-retraction test whenever maintenance is performed around the strut area.

Part total time unknown.

CESSNA

Cessna; Models 100, 200, 300, and 400 Series Airplanes; Fuel, Oil & Hydraulic Hoses

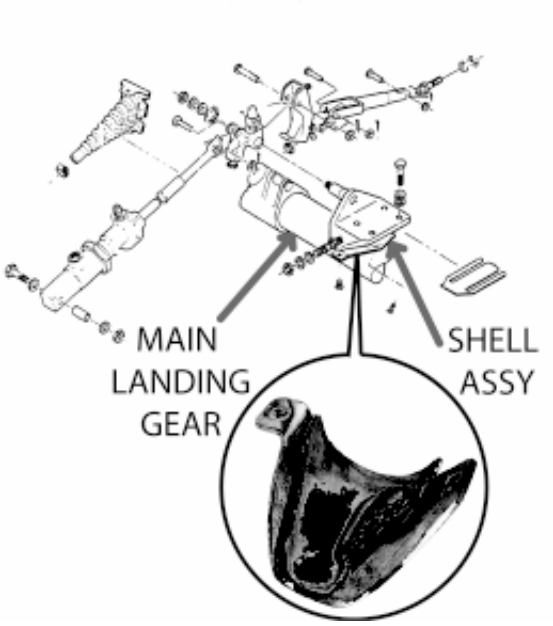
This article was provided by the FAA Aircraft Certification Office Aircraft, Propulsion and Services (ACE-118W) located in Wichita, Kansas.

The FAA issued Airworthiness Directive (AD) 97-01-13 on certain Cessna Models 100, 200, 300, and 400 series airplanes that were equipped with fuel, oil, and hydraulic hoses shipped from Cessna Parts Distribution between March 28, 1995, and June 28, 1996.

Subsequent to the issuance of AD 97-01-13, the FAA became aware that suspect hoses may have been installed on additional Cessna 200 and 300 Series Airplanes. The FAA initially planned to supersede AD 97-01-13 by the issuance of additional regulatory action. However, it has been determined that enough time has elapsed since the suspect hoses were shipped by Cessna that routine maintenance should have encouraged the replacement of any suspect hoses that might still be in the fleet or available from spares support facilities in the field. Therefore, the FAA is publishing this Alerts Article to advise owners, operators, and repair facilities that any remaining S51-10 hoses shipped by Cessna between March 1995, and June 1996, and possibly installed between March 1995, and February 1997, should by now be removed from service on all Cessna Models 100, 200, 300, and 400 series airplanes.

Cessna; Model P210N; Pressurized Centurion; Main Landing Support; ATA 3230

During an inspection, the technician discovered the left and right main landing gear down-lock support shell bumpers (P/N 1241630-7 left, and P/N 1241630-8 right) had debonded. The bumper edges had curled over preventing the main gear strut from making full-down travel. This condition prevented the main landing gears from properly locking. (Refer to the illustration.)



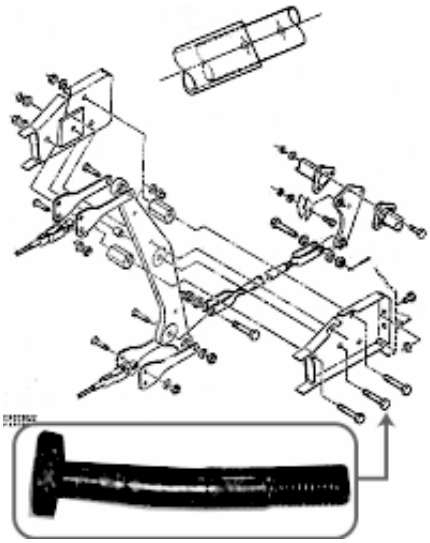
The submitter believes the composition of the shell bumper material does not have good bonding qualities.

Part total time-137 hours.

Cessna; Model 340; Elevator Control System; ATA 2730

Five recently processed Malfunction or Defect (M or D) reports cited failure of the elevator bellcrank (P/N 5360801-4) pivot bolt (P/N AN4-14). According to the submitter, one of the five aircraft's elevator bellcrank bolts was broken and the others were bent. He stated the only way to check the condition of the bolt is to loosen the elevator cables and remove the bolt. One bolt was so bent that he had to remove a skin panel on the side of the aircraft in order to drive the bolt out. (Refer to the illustration.)

The submitter feels a few items may be contributing to this defect other than the part's total time. Excess elevator movement may occur when the aircraft sits on the ramp during windy conditions. There are no spacers supporting the sides of the bearing in the center pivot of the bellcrank, which allows side movement and may be a contributing factor to this defect.



The submitter stated the Maintenance Manual does show a spacer between the bellcrank center pivot point, but the Illustrated Parts Catalog (IPC) does not.

Part total time averaged-6,256 hours.

Cessna, Models 300 and 400 series; Cabin Heater Fuel Line; ATA 2140

The following article was submitted by the ACO Manager, Airframe, Propulsion & Services Wichita Aircraft Certification Office, ACE-118W.

Service Difficulty Reports are being received of leaking cabin heater fuel lines on Cessna Models 300 and 400 series aircraft. An example of this is FAA Flight Standards District Office (FSDO) Memorandum dated October 29, 2002. This memo describes a Cessna 414A aircraft, which experienced fire damage to the cabin heater. An investigation showed that the fuel supply line to the cabin heater had a hole in it that allowed fuel to spray on the heater causing a fire.

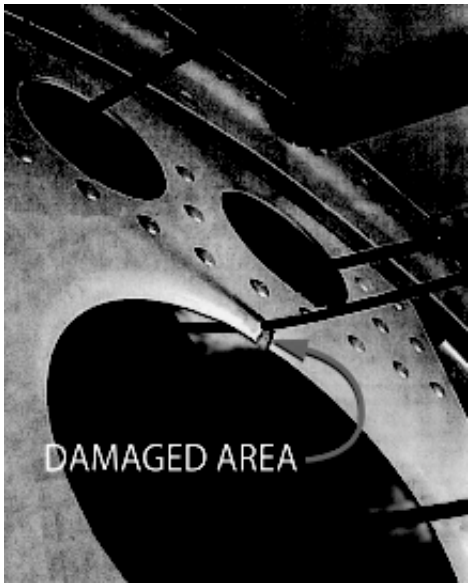
It has been found that cabin heater fuel supply lines on Cessna 300 and 400 series aircraft are susceptible to corrosion and chafing. Cessna provided service bulletin MEB-95-9 dated 6/16/95, which mandates inspection and repair or replacement of corroded lines on Models 310/320/340/411 aircraft. This service bulletin is not effective for 400 series aircraft other than the Model 411.

Since an operator is not required to incorporate a service bulletin to maintain an airworthiness certificate, and all affected aircraft are not covered by the published service bulletin, owners, operators, and maintenance personnel should inspect the cabin heater fuel supply lines (in the cabin and forward to the heater) on all Cessna 300 and 400 series aircraft for corrosion, chafing, and fuel leaks. If corrosion, wear damage, or leaks are found, it is recommended that the fuel line be replaced before further flight. As required by Cessna Service Bulletin MEB-95-9, the noted fuel lines should be re-inspected after every 100 hours of operation or 12 months, whichever occurs first.

LEARJET

Learjet; Model 31; Elevator Control Cable; ATA 2730

During an inspection the technician discovered the left aft elevator control cable (P/N 2300003171) was misrouted and cutting into the structure rib at frame 29 station 541.57. (Refer to the illustration.)



Learjet; Model 35A; Century III; Airfoil Anti-Ice Bleed Air System; ATA 3010

During flight, the crew and passenger noticed a burning odor and haze in the cabin. The pilot diverted the aircraft to an alternate airport for maintenance.

The technician discovered a leak in the bleed-air crossover duct (P/N 2619036-17) for the left wing and stabilizer heat. Further investigation revealed that the gasket (P/N 2619036-1) failed on the crossover duct connection to the cabin heat duct.

Part total time–294 hours.

PIPER

Piper; Model PA 44-180; Seminole; Nose gear Trunnion; ATA 3222

During a takeoff roll and when the aircraft was at about 79 knots, the pilot heard a loud pop and saw a piece of the nose gear fly off the aircraft. He aborted the takeoff. While steering the aircraft back to the ramp, he noticed a difference in the steering.

During an inspection, the technician discovered that the lower rear section of the nose landing gear trunnion assembly had broken off.

The submitter stated that when the section of the trunnion assembly separated, it caused the shimmy dampener shaft to shear, and bent the bracket on the shimmy dampener body. This is the reason the pilot noted a difference in steering the aircraft.

Part total time-1,029 hours.

Piper; Model PA 46-310P; Malibu; Wing Flap Control; ATA 2750

The pilot reported that the aircraft rolled when he selected flaps down.

The technician inspected the system and found the left flap bellcrank (P/N 82905-002) was broken.

According to the submitter, the failed part was previously inspected in accordance with Piper Service Bulletin (S/B) 1062. At the time of the inspection, the aircraft was in compliance with the S/B. The breakage was located in the shaft area of the bellcrank, which was not included in the S/B.

Part total time-3,874 hours.

HELICOPTERS

KAMAN

Kaman; Model HH-43B/F (K-600); Lycoming T-53 turboshaft equipped; RPM Compensator Control Box Assembly; ATA 7600

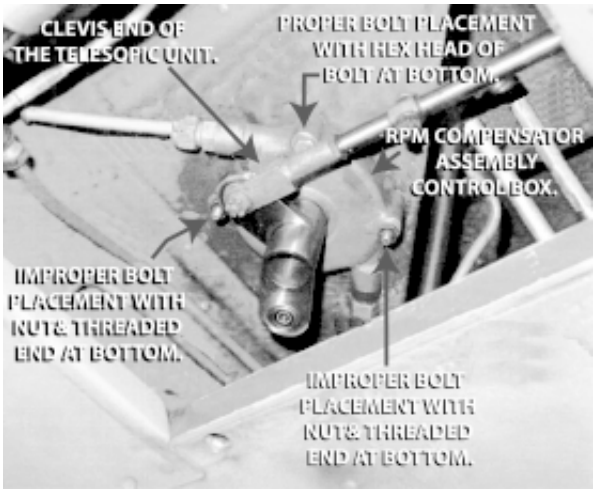
The pilot entered a flare and encountered a jammed collective at a high power setting.

A post-incident investigation revealed that the four hex head bolts, which secure the RPM compensator assembly control box into the cabin ceiling, had been installed such that each bolt head was at the top of the control box with each threaded bolt end extruding downward through the control box bolt retaining ears. The threaded (nut) ends of all four bolts were observed extending out the bottom of the control box retaining holes such that the threaded end of each bolt faced down, and at least one bolt end was found to interfere with the movement of the RPM compensator telescopic unit clevis.

The maintenance instructions contained in the Type Certificate Holder's Technical Order for the HH-43 covering the removal and installation of the RPM compensator assembly control box were reviewed. (Refer to the illustration.) The installation procedure was described under Section III, paragraph 3-91 (x) as follows:

"Position control box assembly (13) on cabin ceiling and secure with four bolts, eight washers and four nuts."

The Technical Order provided no guidance as to the proper orientation (up or down) for the bolts upon installation and no caution that reverse installation could lead to collective jamming.



Part total time unknown.

AMATEUR, EXPERIMENTAL, AND SPORT AIRCRAFT

FUEL TANKS

The Delegation and Airworthiness Programs Branch (AIR-140) recommended this article.

The pilot of a single-engine experimental amateur-built aircraft was at 2400 feet MSL when he experienced a partial engine failure. Shortly thereafter, the engine became erratic, and then failed completely. The pilot landed in a soybean field.

Investigation disclosed two drilled out rivet heads lodged in the fuel line that had apparently caused fuel starvation and engine stoppage. The aircraft had been in service for approximately three years.

Although the source of the rivet heads is unknown, they may have inadvertently fallen into the open fuel tank filler during construction or maintenance activity. The investigator recommends that experimental aircraft builders consider installing a finger screen at the outlet of the fuel tank. The screen would catch and retain debris before it entered the fuel line. Periodic inspection and cleaning of the finger screen may eliminate debris from the tank preventing it from clogging the fuel line.

AIR NOTES

ELECTRONIC VERSION OF MALFUNCTION OR DEFECT REPORT

One of the recent improvements to the Flight Standards Service Aviation Information Internet web site is the inclusion of FAA Form 8010-4, Malfunction or Defect Report. This web site is still under construction and further changes will be made; however, the site is now active, usable, and contains a great deal of information.

Various electronic versions of this form have been used in the past; however, this new electronic version is more user friendly and replaces all other versions. You can complete the form online and submit the information electronically. The form is used for all aircraft except certificated air carriers who are provided a different electronic form. The Internet address is:

http://av-info.faa.gov/isdr/

When the page opens, select “M or D Submission Form” and, when complete, use the “Add Service Difficulty Report” button at the top left to send the form. Many of you have inquired about this service. It is now available, and we encourage everyone to use this format when submitting aviation, service-related information.

SERVICE DIFFICULTY REPORTING PROGRAM

The objective of the Service Difficulty Reporting (SDR) Program is to achieve prompt and appropriate correction of conditions adversely affecting continued airworthiness of aeronautical products fleet wide. The SDR program is an exchange of information and a method of communication between the FAA and the aviation community concerning inservice problems.

A report is filed whenever a system, component, or part of an aircraft, powerplant, propeller, or appliance fails to function in a normal or usual manner. In addition, if a system, component, or part of an aircraft, powerplant, propeller, or appliance has a flaw or imperfection which impairs, or which may impair its future function, it is considered defective and should be reported under the program.

These reports are known by a variety of names: Service Difficulty Reports (SDR), Malfunction or Defect Reports (M or D) and Maintenance Difficulty Reports (MDR).

The collection, collation, analysis of data, and the rapid dissemination of mechanical discrepancies, alerts, and trend information to the appropriate segments of the FAA and the aviation community provides an effective and economical method of ensuring future aviation safety.

The FAA analyzes SDR data for safety implications and reviews the data to identify possible trends that may not be apparent regionally or to individual operators. As a result of this review, the FAA may disseminate safety information to a particular section of the aviation community. The FAA also may adopt new regulations or issue airworthiness directives (AD's) to address a specific problem.

The primary source of SDR's are certificate holders operating under Parts 121, 125, 135, 145 of the Federal Aviation Regulations, and the general aviation community which voluntarily submit records. FAA Aviation Safety Inspectors may also report service difficulty information when they conduct routine aircraft and maintenance surveillance as well as accident and incident investigations.

The SDR data base contains records dating back to 1974. Reports may be submitted on the Internet through an active data entry form or on hard copy. The electronic data entry form is in the Flight Standards Aviation web site. The URL is: <http://av-info.faa.gov>.

A public search/query tool is also available on this same web site. This tool has provisions for printing reports or downloading data.

At the current time we are receiving approximately 45,000 records per year.

Point of contact is:
John Jackson
Service Difficulty Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125

Telephone: (405) 954-6486
E-Mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

We welcome your comments, suggestions, and questions. You may use any of the following means of communication to submit reports concerning aviation-related occurrences.

Editor: Isaac Williams (405) 954-6488
FAX: (405) 954-4570 or (405) 954-4655

Mailing address: FAA, ATTN: AFS-620 ALERTS, P.O. Box 25082,
Oklahoma City, OK 73125-5029

You can access current and back issues of this publication from the internet at:
<http://av-info.faa.gov>. Select the General Aviation Airworthiness Alerts heading.

AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports submitted between March 26, 2003, and April 22, 2003, which have been entered into the FAA Service Difficulty Reporting (SDR) System data base. This is not an all inclusive listing of Service Difficulty Reports. For more information, contact the FAA, Regulatory Support Division, Aviation Data Systems Branch, AFS-620, located in Oklahoma City, Oklahoma. The mailing address is:

FAA
Aviation Data Systems Branch, AFS-620
PO Box 25082
Oklahoma City, OK 73125

These reports contain raw data that has not been edited. If you require further detail please contact AFS-620 at the address above.

FEDERAL AVIATION ADMINISTRATION
Service Difficulty Report Data

Sorted by Aircraft Make and Model then Engine Make and Model. This Report Derives from Unverified Information Submitted By the Aviation Community without FAA review for Accuracy.

ACFT MAKE ACFT MODEL REMARKS	ENG MAKE ENG MODEL	COMP MAKE COMP MODEL	PART NAME PART NUMBER	PART CONDITION PART LOCATION	DIFF-DATE OPER CTRL NO.	T TIME TSO
	CONT		BUSHING	MISMANUFACTURE	11/16/2001	
	A502		SA639193	CRANK C/WEIGHT	2003041000055	
WHILE CHECKING THE SIZE OF THE NEW MFG SA639193 BUSHINGS PRIOR TO INSTALLATION IN THE COUNTERWEIGHTS I FOUND TWO NEW STANDARD SIZE BUSHINGS THAT WERE APPROXIMATELY. 002 SMALL IN THE OUTER DIAMETER.						
	CONT		CRANKSHAFT	BROKEN	03/15/2002	
	A75*		A50446	ENGINE	2003041000054	
OWNER COMPLAINED ABOUT THE ENGINE KNOCKING. BROUGHT ENGINE TO US FOR INSPECTION. UPON DISASSEMBLY WE FOUND THE CRANKSHAFT IN TWO PIECES. THE CRANKSHAFT WAS BROKEN BETWEEN THE FRONT MAIN JOURNAL AND THE NR 4 ROD BEARING JOURNAL. ENGINE WAS OPERATING ON AUTO FUEL. ENGINE HAD BEEN DISASSEMBLED FOR REPAIR WORK APPROXIMATELY 20 HOURS BEFORE.						

	CONT	CYLINDER	WORN	03/12/2003	
	IO550F		ENGINE	2003041600155	

(CAN) ON INSPECTION OF 2 CYLINDERS, 1ST CYLINDER MEASUREMENT OF THE BARREL OF THE CYLINDER VARIES FROM 5. 252' AT THE ENTRANCE OF THE CYLINDER AND 5. 255' AT THE BOTTOM. MAXIMUM LIMITS ARE 5. 256 INCHES. WE DISCOVERED A 'STEP' (SEE PHOTO) AT THE BOTTOM 0. 008 DEEP. THIS 'STEP' WAS FORMED BY WHERE THE RINGS STOPPED THEIR TRAVEL. THE EXHAUST VALVE WAS WORN 0. 005ON THE STEM. 2ND CYLINDER - THE CYLINDER BARREL MEASUREMENT VARIED FROM 5. 252 TO 5. 259. WE SURPASS THE ALLOWABLE LIMITS ESTABLISHED BY THE MANUFACTURER (5. 256). THE EXHAUST VALVE WAS WORN 0. 007 ON THE STEM A ND IT ALSO HAD A 0. 008 'STEP' AT

AIRTRC		TANK	CRACKED	03/31/2003	
AT802		512681	FUEL	2003041600172	

(CAN) DURING INSPECTION A CRACK WAS DISCOVERED ON THE FUEL HEADER TANK END PLATE. THE HEADER TANK WAS REMOVED AND REPLACED WITH A NEW PART. AIRCRAFT WAS RETURNED TO SERVICE.

BEECH	PWA	RIB	CRACKED	02/04/2003	19698
100BEECH	PT6A28	11562001025	HORIZONTAL STAB	2003040100437	

(CAN) THE HORIZONTAL STABILIZER WAS REMOVED FOR ROUTINE MAINTENANCE. UPON INSPECTION OF THE LT AND RT NR 1 LEADING EDGE RIBS IT WAS NOTED THAT THE LT RIB WAS CRACKED ALONG LOWER FORWARD RADIUS FOR APPROXIMATELY TWO INCHES. THIS AREA IS DIFFICULT TO INSPECT WITH HORIZONTAL STABILIZER INSTALLED AS THE NR 1 RIB IS IN CLOSE PROXIMITY TO THE AIRCRAFT EMPENNAGE AND BEHIND AN AIR SEAL.

BEECH	PWA	CONNECTOR	CRACKED	02/27/2003	10024
1900D	PT6A67D	35821511	AUTOFEATHER SYS	2003041500029	

(CAN) CREW REPORTED THAT AUTOFEATHER DISABLE LIGHT WOULD ILLUMINATE DURING CLIMB AND DECENT PORTIONS OF FLIGHT. MAINTENANCE DID NUMEROUS ATTEMPTS TO DUPLICATE WITH SYSTEM PARTS BEING REPLACED FOR TROUBLESHOOTING PURPOSES. TEST FLIGHTS WHERE COMPLETED WITH THE DEFECT ALSO NOT DUPLICATED. THE PRINTED CIRCUIT BOARD CONNECTOR WAS FOUND TO HAVE A HAIRLINE CRACK AND WAS REPLACED. THE AIRCRAFT HAS FLOWN APPROX. 7 DAYS WITHOUT REOCCURRENCE.

BEECH	PWA	BEARING RACE	CRACKED	03/17/2003	
1900D	PT6A67D		PROP BLADE	2003041600118	

(CAN) PROP REMOVED DUE TO EXCESSIVE BLADE RADIAL PLUS END PLAY. UPON DISASSEMBLY 2 OPPOSING BLADE BEARING WERE FOUND TO BE CRACKED. HUB FORWARDED TO HARTZELL FOR EVALUATION OF DAMAGE.

BEECH	PWA	BUNGEE	FAILED	03/05/2003	
200BEECH	PT6A41		NLG STEERING	2003041000024	

(CAN) NOSE GEAR STEERING FAILED DURING TAXI. THE CREW EXPERIENCED A (THUMP) IN THE RUDDER / STEERING SYSTEM. AFTER THE (THUMP) THE CREW WAS UNABLE TO TAXI THE AIRCRAFT IN A STRAIGHT LINE. INSPECTION REVEALED THAT THE NOSE GEAR STEERING SPRING BUNGEE ASSEMBLY HAD FAILED. FAILURE OCCURRED IN THE SPRING CLIP RETAINING SLOT AREA. SB 2220 DEALS WITH THIS ISSUE. THIS OPERATOR SHALL INITIATE ADDITIONAL INSPECTIONS TO PREVENT REPEAT OCCURRENCES.

BEECH	PWA	GOVERNOR	INOPERATIVE	01/13/2003	
200BEECH	PT6A41	8210007	PROPELLER	2003041600082	

(CAN) ON RETURN FLIGHT PILOTS REPORT THAT RT PROPELLER RPM STAYED AT 2100. THEY WERE NOT ABLE TO GOVERN PROPELLER SPEED. AFTER LANDING MAINTENANCE CHECKED THE SYSTEM AND DETERMINED THAT REPLACEMENT OF PROP. GOVERNOR WAS REQUIRED. AFTER REPLACEMENT WITH A SERVICEABLE PART, FUNCTION CHECK WAS COMPLETED AND OPERATION WAS NORMAL.

BEECH	PWA	CONTROL	SHEARED	01/28/2003	
200BEECH	PT6A41	1013800005	LE FLAPS	2003041600086	

(CAN) ON APPROACH AIRCRAFT FLAP ASYMMETRY TRIPPED. ON INSPECTION OF FLAP SYSTEM THE L/H OUTBOARD FLAP CABLE DRIVE AT MOTOR FOUND SHEARED. NEW OUTBOARD L/H FLAP CABLE INSTALLED (P/N 101-380000-5). FLAP SYSTEM FUNCTION TEST CARRIED OUT. TESTED OK.

BEECH	PWA	BULKHEAD	CRACKED	01/20/2003	20152
200BEECH	PT6A41	10143002115	FUSELAGE	2003041600089	20152

(CAN) CREW REPORTED ON LAST LEG TO AIRPORT, LOW PRESSURIZATION OF 3. 2 PSI. DURING TROUBLESHOOTING FOUND A CRACK FOUR INCHES LONG ON BULKHEAD. LOCATION - CENTER OF FUSELAGE AT STATION 227. 125.

BEECH	PWA	PROPELLER	FAILED	03/07/2003	
300BEECH	PT6A60A	HCB4MP3		2003041600092	

(CAN) ON LANDING ON A CLEARED RUNWAY WITH SNOW & ICY PATCHES, SKY CLEAR & WIND CALM, PILOT HAD DIFFICULTY CONTROLLING A/C. AS A/C SLOWED DOWN RUDDER CONTROL BECAME INEFFECTIVE CAUSING A/C TO DRIFT INTO RT SNOW BANK. UPON INVESTIGATING LT PROP, FOUND IN A FINE PITCH POSITION & BLADES WERE BENT BACK 90 DEGREES FROM DIRECTION OF ROTATION. RT PROP BLADES WERE FOUND TO BE 180 DEGREES FROM FEATHERED POSITION & WERE BENT BACK IN DIRECTION OF ROTATION. PROPS WILL BE REMOVED AND FORWARDED TO A PROP OVERHAUL FACILITY WHERE RT PROPELLER WILL BE DISASSEMBLED AND INSPECTED TO SEE IF AN INTERNAL FAILURE RESULTED IN BLADES GOING INTO THIS POSITION CAUSING THE AIRCRAFT TO LOOSE

BEECH	PWA	POWER SUPPLY	SHORTED	02/19/2003	
A100	PT6A28	PWFLC28	CABIN	2003041500009	

(CAN) DURING CLIMB, SMOKE WAS NOTICED IN THE CABIN AREA. CABIN FIRE EXTINGUISHER WAS DISCHARGED IN GENERAL AREA OF SMOKE. NO OPEN FLAMES WERE NOTICED. AFTER LANDING MAINTENANCE INVESTIGATED AND FOUND THAT T HE SOLID STATE POWER SUPPLY FOR AN OVERHEAD FLUORESCENT LIGHT HAD AN INTERNAL SHORT. THERE WAS NO DAMAGE TO ADJACENT STRUCTURE INSULATION OR WIRING. POWER SUPPLY WAS REPLACED WITH NEW PART. SYSTEM WORKED NORMALLY.

BEECH	PWA	CONTROL	INOPERATIVE	03/20/2003	2579
B200	PT6*	10138800511		2003041000062	

DURING APPROACH TO LANDING AT ABQ THE GEAR WOULD NOT EXTEND IN NORMAL OPERATION. LANDING GEAR HYDRAULIC POWER PACK MOTOR WOULD RUN WHEN HANDLE IN DOWN POSITION BUT GEAR WOULD NOT MOVE. EXTENDED GEAR WITH EMERGENCY SYSTEM. INSTALLED NEW SOLENOID VALVE AND GEAR OPERATED NORMALLY.

BEECH	PWA	WINDSHIELD	CRACKED	03/01/2003	814
B200	PT6A60A	101384502522	COCKPIT	2003041000066	

CO-PILOT WINDSHIELD CRACKED DURING CRUISE. THIS UNIT WAS INSTALLED ON 01/16/2002 AT 7294. 2 TT A/F. CURRENT INSPECTION REQUIREMENT CALLS FOR A WINDSHIELD SCREW TORQUE CHECK EACH 200 HOURS. OUR EXPERIENCE HAS SHOWN THAT SOON AFTER RETORQUEING THE WINDSHIELD WILL FAIL. SUGGEST THAT MFG MODIFY THE RETORQUE REQUIREMENT AT EACH 200 HOUR.

BEECH	PWA	BUSHING	SEIZED	03/25/2003	
C90	PT6A21	905240241	ELEVATOR TRIM	2003041600136	

(CAN) LT & RT ELEVATOR TRIM HORN INNER BUSHINGS HAD TO BE DRIVEN OUT OF INNER BUSHINGS WITH HAMMER AND PUNCH. ONCE REMOVED & MEASURED, INNER BUSHING DIMENSION WAS FOUND TO BE THE SAME AS OUTER BUSHING INNER DIAMETER. THERE WAS NO CORROSION BETWEEN THE 2 BUSHINGS. THIS LEFT A 0 CLEARANCE FIT NOT ALLOWING FREE BEARING MOVEMENT. NEW OUTER & INNER BUSHINGS WERE RECEIVED. NEW OUTER BUSHINGS HAVE A MEASURED INNER DIAMETER. 3735. REMOVED OUTER BUSHING. ID WAS MEASURED AT . 3750. BUSHINGS HAVE BEEN INSTALLED IN ELEVATOR TRIM HORN & INNER BUSHING NOW FREELY ROTATE WITHIN OUTER BUSHING. LT BUSHING LOCATED IN END OF THE ELEVATOR TRIM TAB ACTUATOR ALSO REQUIRED FORCEFUL REMOVAL DUE TO CORROSION.

BEECH PWA ELECTROMECH MOTOR BURNED 04/07/2003 1097
C90A PT6* 903840311 3521000 VENT BLOWER 2003041100158
DURING FLIGHT, CREW HAD SMOKE IN THE CABIN. SHUTTING OFF THE VENT BLOWER CLEARED THE SMOKE FORM THE CABIN. AFTER REMOVING THE CABIN VENT BLOWER FROM THE AIRCRAFT INSPECTION OF IT FOUND THE MOTOR LOCKED UP AND THE BRUSHES BURNED UP.
BEECH PWA CHANNEL CHAFED 02/18/2003
C90A PT6A21 504400317 HORIZONTAL STAB 2003041600001
(CAN) UPPER ELEVATOR CABLE P/N NAS304-34-0753 FOUND INCORRECTLY ROUTED. INSTEAD OF PASSING THROUGH THE LIGHTNING HOLES IN AFT BOX STRUCTURE P/N50-440031-7, THE CABLE WAS ROUTED ABOVE THE STRUCTURE. THIS CAUSED THE ELEVATOR CABLE TO CUT INTO THE CHANNEL ASSY. WHEN FOUND THE CABLE HAD SAWN INTO THE EDGE OF THE CHANNEL. THE ELEVATOR BELLCRANK HAD BEEN REPLACED 84HRS PREVIOUSLY.
BEECH PWA GYRO FAILED 03/31/2003
C90A PT6A21 6226163002 COCKPIT 2003041600002
(CAN) NR 2 HSI COMPASS CARD FAILS TO DISPLAY TRUE COMPASS HEADING WITH NO FLAG IN VIEW. WHEN FAILED THE NR 2 HSI COMPASS CARD CANNOT BE SLOWED IN EITHER SLAVE OR FREE MODES, AND IS FROZEN ON ONE BEARING. THE PAIRED CROSS SIDE RMI REMAINS SERVICEABLE AND CAN BE SLEWED IN BOTH FREE AND SLAVE MODE. NO WARNING FLAGS OCCUR ON ANY SYSTEM. NR 2 HEADING SYSTEM IS COUPLED TO P/N 331A-3G HSI. APPARENT FAILURE IS A LACK OF 26 VAC SUPPLY FROM PIN 31 OF THE DGS-65 TO NR 2 HSI. REPLACEMENT OF DGS-65 GYRO CLEARS THE FAULT. THE SAFETY CONCERN IS THE LACK OF A HDG WARNING FLAG ON NR 2 HSI WHEN FAULT OCCURS.
BEECH PWA RAYTHN BUSHING SEIZED 03/25/2003
C90A PT6A21 906100105 CONTROL ROD 2003041600134
(CAN) BUSHING INSERTED INTO ELEVATOR TRIM TAB HORNS, BOTH LT AND RT FOUND TO BE INCORRECTLY INSTALLED. BUSHING WAS NOT INSERTED FAR ENOUGH INTO THE HORN. THIS CAUSED THE CLEVIS FORK END TO CLAMP THE OUTER BUSHING AND HORN TAB INSTEAD OF THE INNER BUSHING. THE INNER BUSHING HAD TO BE DRIVEN OUT WITH A HAMMER AND PUNCH. ONCE REMOVED AND MEASURED, THE INNER BUSHING DIMENSION WAS FOUND TO BE THE SAME SIZE AS THE OUTER BUSHING. THIS LEAVES A ZERO CLEARANCE FIT WHICH DOES NOT
BEECH LYC SLICK SHAFT CRACKED 03/20/2003
D95A IO360B1B MAGNETO 2003041600114
(CAN) RT ENGINE WOULD NOT START. DURING TROUBLESHOOTING THE MAGNETO WAS REPLACED. DURING THE INSPECTION OF THE MAGNETO, IT WAS NOTICED THAT THE MAGNETO SHAFT WAS CRACKED AT THE POINT WHERE THE PHENOLIC CAM FOR THE POINTS IS INSERTED INTO THE SHAFT. ALSO EXCESSIVE WEAR WAS NOTICED ON THE CAM. WE DON'T SUSPECT THE CRACK IN THE SHAFT AFFECTED THE OPERATION OF THE MAGNETO EVEN WITH THE
BEECH PWA WHEEL BROKEN 03/20/2003 9197
E90 PT6* 50300010133 MLG 2003041000049
THE INBOARD WHEEL HALF FAILED FROM ONE BOLT HOLE AND THE CRACK WALKED ALL THE WAY AROUND THE WHEEL HALF. THE WHEEL AXLE NUT WAS THE ONLY THING THAT KEPT THE WHEEL ON THE AXLE. THIS HAPPENED DURING TAXI TO TAKEOFF.
BEECH CONT BUSHING BROKEN 03/07/2003
P35 IO470* 358100757 WORM 2003041100140
THE BUSHINGS AT THE HANDLE END OF THE WORM DRIVE SHAFT WERE SEVERELY WORN AND BROKEN WHICH WOULD ALLOW THE SHAFT TO MOVE BACK AND FORTH AND OVER A PERIOD OF TIME THE LOCKNUT BACKED OFF FAR ENOUGH TO ALLOW THE WORM DRIVE SHAFT TO MOVE BACK AND FORTH A SIGNIFICANT AMOUNT WHICH WOULD CAUSE A BINDING IN THE SECTOR TO WORM GEAR CONTACT AREA. THIS IS WHY THE MOTOR LOCKED UP AND THE EMERGENCY GEAR SYSTEM DID NOT ALLOW THE GEAR TO BE MOVED IN EITHER DIRECTION.
BEECH CONT PUMP SHEARED 03/19/2003 2539
V35 GTSIO520* 414000103 INJECTOR 2003041000041
ENGINE QUIT DURING TAKEOFF. THE AIRCRAFT WAS SUBSTANTIALLY DAMAGED. INVESTIGATION REVEALED A SHEARED DRIVE SHAFT FOR THE ENGINE DRIVEN FUEL PUMP (INJECTOR PUMP). DISASSEMBLY REVEALED FOD (A SMALL PIECE OF WIRE) JAMMED IN THE ROTOR/VANE. FURTHER INVESTIGATION OF OTHER COMPONENTS OF THE AIRCRAFT FUEL SYSTEM REVEALED THAT THE LOW PRESSURE FUEL PUMP HAD FAILED INTERNALLY AND FRAGMENTS, INCLUDING PIECES OF THE WIRE-LIKE ROTOR PINS, HAD FLOWED TO THE INJECTOR PUMP. NOTE: THE INJECTOR PUMP HAD RECENTLY BEEN REPAIRED DUE TO FAILURE CAUSED BY DAMAGED VANES/ROTOR. SUBMITTER SURMISES THAT THE LAST INJECTOR FAILURE WAS ALSO DUE TO FOD FROM THE SAME FAILED LOW PRESSURE PUMP.
BELL SPAR CRACKED 03/21/2003 3466
206B 8644402 NLG 2003041200001
FOUND CRACK IN SPAR WEB AT NOSE GEAR SUPPORT AFT ATTACH. BOLT
BELL ALLSN CONTROL UNIT INTERMITTENT 03/05/2002
206L 250C20R 6891969 AUTO RELIGHT 2003041000023
AUTO-RELIGHT SYSTEM ACTIVATES INTERMEDIATELY DURING NORMAL ENGINE OPERATION.
BELL ALLSN STIFFENER CRACKED 06/21/2002 2587
206L4 250C30 206033110239 FUSELAGE 2003041100152
FOUND SUBJECT STIFFENER AND WEB CRACKED DURING MAINTENANCE EVENT. GAINED ACCESS AND FOUND RIGHT HAND BEAM ALSO CRACKED. BEAM AREA WAS HIDDEN UNTIL DISASSEMBLY SHOWED FURTHER DAMAGE. SUGGEST THAT BETTER ATTENTION IS PAID TO THIS AREA ON INSPECTIONS, ESPECIALLY IF HELICOPTER IS SUBJECTED TO A HARD LANDING OR IS USED FOR EXTERNAL LOAD OPERATIONS. MANUFACTURER COULD MODIFY STIFFENER IN THE CURVED AREA TO STRENGTHEN THE ASSEMBLY.
BELL LYC FITTING CRACKED 02/21/2003
222U LTS101750C1 222031506103A BULKHEAD 2003041500007
(CAN) UPON A THREE HUNDRED HOUR INSPECTION 270 BULKHEAD FITTING 222-031-506-103A WAS FOUND CRACKED. TO REPAIR INCORPORATION OF TB 222U-94-72.
BELL ALLSN STUD CRACKED 03/18/2003
407 250C47B 407010105101 M/R HEAD 2003041600123
(CAN) TYPICAL CRACK FOUND AT OVERHAUL OF MAIN ROTOR HEAD.
BELL IMPELLER CRACKED 04/02/2003
412 2660162401 COOLER BLOWER 2003041200002
IMPELLER FOUND CRACKED DURING NDI. CRACK WAS 1/4 INCH LONG EMANATING FROM BLADE TIP, IMMEDIATELY ADJACENT TO REINFORCEMENT RING, EXTENDING STRAIGHT IN DIRECTION OF BLADE ROOT. REPLACED WITH NEW
BELL GRIP CRACKED 02/19/2003 627
47G3B2 R47120252003F MAIN ROTOR 2003041000015
EDDY CURRENT SHOWED CRACK IN THREAD AREA OF GRIP. BLANCA TAB
INOPERATIVE 03/01/2003
14193 ELEVATOR TRIM 2003041100167
ELEVATOR TRIM TAB SYSTEM BECAME DIFFICULT TO OPERATIVE. IT BINDS. IT WAS DETERMINED THAT THE ORIGINAL LUBRICANT HAD CONGEALED IN THE LONG TRIM TAB UNIT, FROM COCKPIT TO TAIL. THIS RESULTED IN AN NONFUNCTIONAL TRIM TAB. THE TRIM IS ENCASED INSIDE A LONG TUBE FROM COCKPIT HANDLE TO TAIL SECTION. IT IS ATTACHED TO AND JUST UNDERNEATH THE UPPER FUSELAGE. EXCESSIVE FRICTION INSIDE THIS TUBE CAUSED THE PROBLEM. LUBRICATE IS THE ANSWER.

BLANCA	CONT	TAB	INOPERATIVE	03/01/2003	
14193	IO470*		ELEVATOR TRIM	2003041100166	

ELEVATOR TRIM TAB BECAME TIGHT AND HARD TO USE, AND FINALLY IT BECAME INOPERATIVE. IT IS VERY DIFFICULT TO GET TO THIS PROBLEM, SINCE THE PART CONTAINING THE MOVABLE TRIM TAB IS ENCASED IN A TIGHT TUBE AND IT IS ABOVE THE OVERHEAD AND BELOW THE OUTER FABRIC SKIN OF THE AIRPLANE IN THE COCKPIT

BOEING		DISPLAY	FAULTY	02/14/2003	
737800*		1741010201	CENTRAL	2003040100171	

(AUS) NR 1 MULTIPURPOSE CONTROL DISPLAY UNIT (MCDU) FAULTY. INVESTIGATION FOUND AN INTERNAL SHORT CIRCUIT CAUSED BY A LOOSE OBJECT.

CESSNA	CONT	CONTROL	CORRODED	02/11/2003	
140	O200A	0400107104	RUDDER	2003040100336	

(CAN) 2 CABLES FOUND CORRODED AND FRAYED AT FUSELAGE STA. 20. 5. BOTTOM OF FORWARD LANDING GEAR BULKHEAD. DEFECT WAS FOUND ON CABLES BECAUSE THEY HAD TO BE REMOVED FOR MAJOR STRUCTURAL REPAIRS. THOSE CABLES RUN ON PULLEYS ATTACHED TO THE BULKHEAD AT THE VERY BOTTOM OF THE FUSELAGE. VERY HARD TO DETECT UNLESS CABLES ARE REMOVED. FUSELAGE BOTTOM USUALLY VERY DIRTY IN THAT AREA WHERE WATER

CESSNA	CONT	BAFFLE	BROKEN	03/14/2003	12028
172H	O300*		FUEL CELLS	2003041000035	

DURING VISUAL INSPECTION, FOUND FUEL TANK BAFFLE SPOT WELDS BROKEN LOOSE, ALLOWING BAFFLE TO MOVE AROUND FREELY INSIDE FUEL TANK. THIS CONDITION COULD CAUSE FUEL STARVATION DURING A DECENT WITH A LOW FUEL QUANTITY AND COULD CAUSE ERRONEOUS FUEL QUANTITY INDICATIONS DUE TO INTERFERENCE WITH TRANSMITTER FLOAT. PROBABLE CAUSE: THE FRONT FACE OF THE BAFFLE IS APPROXIMATELY 1 INCH BEHIND FUEL TANK FILLER PORT. DURING THE REFUELING PROCESS, IF THE FUEL NOZZLE IS RELAXED, THE NOZZLE CONTACTS THE BAFFLE AND APPLIES EXCESSIVE PRESSURE TO THE BAFFLE EVENTUALLY BREAKING THE SPOT WELDS LOOSE. DURING THE REFUEL PROCESS, DO NOT INSERT FUEL NOZZLE MORE THAN 3 INCHES INTO THE FUEL TANK.

CESSNA	LYC	TUBE	TORN	03/28/2003	
172M	O320E2D	0923150	WHEEL	2003041600171	

(CAN) ON WALK AROUND PILOT NOTICE RT MAIN TIRE FLAT. WHEEL ASSEMBLY REMOVED AND TUBE INSPECTED, TWO TEAR APPROX 1/4 INCH AND APPROX 7 INCHES APART FOUND ON OUTBOARD CENTER SEAM. MICHELIN WAS CONTACTED AND THE FOUR PREVIOUS TUBES WERE SENT TO MICHELIN FOR MORE INSPECTION. TIRE WAS INSPECTED FOR FOREIGN OBJECT AND NO PROBLEM FOUND.

CESSNA	LYC	CRANKSHAFT	CORRODED	03/11/2003	
172P	O320D2J	LW17071	ENGINE	2003041600158	

(CAN) UPON INSPECTION FOR AD 98-02-08 INTERNAL CORROSION. LIGHT SURFACE CORROSION WAS FOUND, WHEN LOG BOOKS CHECKED IT WAS FOUND THAT LYCOMING HAD SIGNED OFF SB530 WHICH A COATING THAT TERMINATES INSP. LYCOMING HAS BEEN CONTACTED AND CORRECTING THE PROBLEM. THIS PROBLEM WAS FOUND DUE AN ERROR IN OUR TRACKING SYSTEM, WHICH SHOWED AD 98-02-08 STILL AS A 5 YEAR INSP. NOTE THE CORROSION FOUND DID NOT REQUIRE THE CRANKSHAFT TO BE REPLACED

CESSNA	LYC	FIREWALL	CRACKED	02/14/2003	
172R	IO360A1A		FUSELAGE	2003041100151	

DURING A PHASE 1 INSPECTION FOUND A CRACK IN THE FIREWALL AT THE LOWER ROW OF RIVETS ATTACHING THE BATTERY BOX TO THE FIREWALL. UPON REMOVAL OF BOX FOR REPAIR FOUND 2ND CRACK UNDER THE OUTBOARD VERTICAL ROW OF RANGE IN MFG SB FIREWALL INSPECTION.

CESSNA	LYC	CARBURETOR	INACCURATE	03/14/2003	
172R	IO360L2A	25765362	ENGINE	2003041000043	

THE CREW REPORTED A ROUGH IDLE DURING GROUND OPERATION. THIS ENGINE/AIRCRAFT COMBINATION HAS BEEN THE SUBJECT OF AN AD REGARDING UNSTABLE IDLE/MIXTURE ISSUES. IT IS NOT UNCOMMON FOR THIS SITUATION TO OCCUR NOT ONLY DURING INSPECTION GROUND RUNS, BUT ALSO DURING OPERATION BETWEEN INSPECTIONS. THE IDLE SYSTEM ON THIS FUEL CONTROL UNIT HAS ISSUES, WHERE IT REQUIRES CONSIDERABLE ADJUSTING WITHIN A RELATIVELY FEW NUMBER OF OPERATING HOURS.

CESSNA	LYC	CARBURETOR	INACCURATE	03/14/2003	
172R	IO360L2A	25765362	ENGINE	2003041000044	

THE CREW REPORTED A ROUGH IDLE DURING GROUND OPERATION. THIS ENGINE/AIRCRAFT COMBINATION HAS BEEN THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE REGARDING UNSTABLE IDLE/MIXTURE ISSUES. IT IS NOT UNCOMMON FOR THIS SITUATION TO OCCUR NOT ONLY DURING INSPECTION GROUND RUNS, BUT ALSO DURING OPERATION BETWEEN INSPECTIONS. THE IDLE SYSTEM ON THIS FUEL CONTROL UNIT HAS ISSUES WHERE IT REQUIRES CONSIDERABLE ADJUSTING WITHIN A RELATIVELY FEW NUMBER OF OPERATING HOURS.

CESSNA	LYC	CARBURETOR	INACCURATE	03/17/2003	
172R	IO360L2A	25765362	ENGINE	2003041000045	

THE CREW REPORTED A ROUGH IDLE DURING GROUND OPERATION. THIS ENGINE/AIRCRAFT COMBINATION HAS BEEN THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE REGARDING UNSTABLE IDLE/MIXTURE ISSUES. IT IS NOT UNCOMMON FOR THIS SITUATION TO OCCUR NOT ONLY DURING INSPECTION GROUND RUNS, BUT ALSO DURING OPERATION BETWEEN INSPECTIONS. THE IDLE SYSTEM ON THIS FUEL CONTROL UNIT HAS ISSUES, WHERE IT REQUIRES CONSIDERABLE ADJUSTING WITHIN A RELATIVELY FEW NUMBER OF OPERATING HOURS.

CESSNA	LYC	CARBURETOR	INACCURATE	03/22/2003	
172R	IO360L2A	25765362	ENGINE	2003041000052	

DURING PRE TAKEOFF GROUND OPERATIONAL CHECK, THE IDLE SPEED WAS ONLY ABOUT 400 RPM. IT WAS ADJUSTED ALONG WITH THE MIXTURE. THIS ENGINE FUEL CONTROL COMBINATION WAS THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE FOR THIS PROBLEM. THE VARIOUS OTHER COMPONENTS OF THIS FUEL CONTROL SYSTEM ALSO HAVE RELIABILITY ISSUES RANGING FROM SCORING OF THE MIXTURE CONTROL PLATES TO IMPROPER MANIFOLD VALVE OPERATION. OFTEN THE INACCURATE OPERATION OF THIS SYSTEM RESULTS IN AN EXTREMELY RICH MIXTURE WHICH CAUSES MANY SPARK PLUG FOULING PROBLEMS.

CESSNA	LYC	CARBURETOR	INOPERATIVE	03/27/2003	
172R	IO360L2A	25765362	ENGINE	2003041000065	

DURING PRE-TAKEOFF CHECK, THE CREW REDUCED THE THROTTLE TO CHECK THE IDLE SPEED. THE ENGINE WOULD ALMOST QUIT EACH TIME IT WAS ATTEMPTED. THIS ENGINE/FUEL CONTROL COMBINATION REQUIRES SUBSTANTIAL ADJUST FOR A VERY FEW HOURS FLOWN.

CESSNA	LYC	CARBURETOR	INACCURATE	03/20/2003	
172R	IO360L2A	25765362	ENGINE	2003041100002	

DURING NORMAL OPERATIONS, THE ENGINE WOULD SPUTTER AND RUN VERY IRREGULARLY AT IDLE. AFTER ROUTINE IDLE SPEED/MIXTURE ADJUSTMENT THE ENGINE RAN PROPERLY. THIS ENGINE/FUEL CONTROL COMBINATION REQUIRES ADJUSTMENT OF THE IDLE SPEED/ MIXTURE MORE OFTEN THAN TYPICALLY REQUIRED IN THE GA TYPE

CESSNA		CONTACTOR	FAILED	03/03/2003	30
172S		X610007	ALTERNATOR	2003041000077	

CONTACTOR FAILS DURING USE, DUE TO IT BEING A CONTINUOUS DUTY RELAY, WAS INTERMITTENT PRIOR TO FAILURE. (THIS IS FOR THE ALTERNATOR OUTPUT TO THE AIRCRAFT BATTERY BUSS.)

CESSNA CONT BULKHEAD CRACKED 02/26/2003
180 O470K 071111224 FUSELAGE 2003041500008
(CAN) DURING ANNUAL INSPECTION, IT WAS DISCOVERED THE BULKHEAD HAD A SUBSTANDARD REPAIR AT REAR FLOAT FITTING ATTACHMENT BRACKETS. PREVIOUS REPAIR REMOVED TO FACILITATE NEW REPAIR. BULKHEAD WAS FOUND TO BE CRACKED BEYOND REPAIR WITH A TOTAL OF 4 CRACKS WITHIN A 8 INCH AREA. CRACKS WERE FOUND IN FLANGE AND WEB. AREA IS SOMEWHAT DIFFICULT TO INSPECT DUE TO FLOOR SKIN COVERING. BULKHEAD IS BEING
CESSNA CONT BRACKET CORRODED 10/15/2002
180 O470K 07900065 LT MLG LEG 2003041500017
(CAN) DURING INSPECTION OUTER GEAR LEG BRACKET FOR LT MAIN GEAR WAS FOUND SEVERELY CORRODED. CORROSION HAD CAUSED SEVERE EXFOLIATION. SUSPECT CORROSION INDUCED FROM ENGINE EXHAUST ENTERING AREA. OUTSIDE COVER WAS NOT SEALED WHICH ALLOWED EXHAUST TO ENTER AND CAUSE CORROSION. PART
CESSNA CONT HINGE SEIZED 10/15/2002
180 O470K 05238161 AILERON 2003041500129
(CAN) DURING INSPECTION AILERONS WERE ACTUATED FROM THE CONTROL COLUMN AND AILERON MOVEMENT WAS FOUND TO BE SPRINGY. VISUAL INSPECTION OF BOTH AILERONS CONFIRMED HINGE PINS WERE SEIZED AND NOT ALLOWING THE HINGE TO MOVE. NEW HINGES INSTALLED.
CESSNA BULKHEAD CRACKED 03/13/2003 4078
182L 07126161 2003041100157
THE AFT FUSELAGE BULKHEAD WAS CRACKED IN THE RADIUS AT THE RUDDER STOP ATTACHMENT POINTS.
CESSNA BULKHEAD CRACKED 03/13/2003 4078
182L 07126161 AFT FUSELAGE 2003041500102
THE AFT FUSELAGE BULKHEAD WAS CRACKED IN THE RADIUS AT THE RUDDER STOP ATTACHMENT POINTS. BLOCK RUDDER WHEN A/C IS TIED DOWN IN WINDY CONDITIONS.
CESSNA CONT LINE CHAFED 03/21/2003 12448
182Q O470* 0700099108 FUEL SYSTEM 2003041000050
FUEL LINE FROM FUEL SELECTOR VALVE TO FUEL STRAINER. RUDDER PEDALS HAD WORN A DEEP GROOVE IN FUEL
CESSNA CONT CARLINGSWTCH SWITCH SPARKS 02/12/2003
182Q O470U LANDING LIGHT 2003040100344
(CAN) SMOKE WAS SEEN COMING FROM THE NAV LIGHT SWITCH. THE SWITCH FELL OUT AND SPARKS WERE SEEN INSIDE THE OPENING. THE SPARKING STOPPED AFTER APPROXIMATELY 30 SECONDS. THE FAULT WAS CONFIRMED BY MAINTENANCE E. NO OTHER DAMAGE WAS EVIDENT. SWITCH IS TO BE REPLACED.
CESSNA PWA BRACKET CRACKED 11/11/2002 4291
208B PT6* 26111441 FLAP MOTOR 2003040100157
PRIMARY FLAP MOTOR CB POPPED WHEN SELECTING FULL FLAPS IN FLT. ON GROUND PROBLEM COULD NOT BE DUPLICATED, RIGGING CHECKED. FURTHER MAINT INSP REVEALED FORE AND AFT SUPPORT BRACKET, OF FLAP MOTOR, BUCKLING AND COMPLETE TRANSVERSE CRACKS OF THE AFT SUPPORT BRACKET, WAS CRACKED OUTBOARD AT ATTACHMENT POINT. ASSY HAD ACCUMULATED 9559 LDGS. MATERIAL OF FWD AND AFT SUPPORT BRACKETS, ARE MADE OF . 032 T2024. THIS MATERIAL WAS SHOWN TO HAD GIVE WHEN HAND PRESSURE WAS APPLIED AFTER NEW PART WAS INSTALLED. DEPLOYMENT OF FLAPS TO FULL AT HIGH AIRSPEEDS, IAW AFM, SHOWED SIGNIFICANT SLOW MOVEMENT OF FLAPS TO FULL DOWN IN FLT. THESE HIGH AERODYNAMIC LOADS PUT UNUSUAL STRESS ON
CESSNA PWA BRACKET CRACKED 03/18/2003
208B PT6A114A EXHAUST 2003041600133
(CAN) REGULAR INSPECTION REVEALED A CRACKED EXHAUST SUPPORT BRACKET, THE BRACKET WAS REPLACED AND AIRCRAFT WAS RETURNED TO SERVICE
CESSNA CONT PROPELLER FAILED 02/17/2003
2105 IO470S D3A36C435A BLADE ANGLES 2003041500013
(CAN) FACTORY NEW PROPELLER STC SA00920CH. - ONLY OBTAIN 2300 RPM STATIC, SHOULD BE 2600 RPM. - FOUND BLADE LOW END STOPS INCORRECTLY SET. - PROP RETURNED TO OBTAIN NEEDED 2600 RPM. - ERROR IN ENGINEERING APPROVAL AT MCCAULEY INCORRECT BLADE ANGLE S.
CESSNA CONT DOWNLOCK STICKING 02/24/2003
210M IO520L S13771 MLG 2003041500107
(AUS) RT MAIN LANDING GEAR DOWNLOCK SWITCH STUCK. RT LANDING GEAR COLLAPSED ON LANDING.
CESSNA CONT PISTON CRACKED 02/19/2003
310L IO470VO 504100077 MLG 2003041600099
(CAN) DURING COMPLETE REMOVAL AND NDT OF ALL LANDING GEAR PARTS BOTH LT & RT MAIN GEAR PISTON AND AXLE ASSEMBLIES (P/N S 5041000-77 & 5041000-76 RESPECTIVELY) WERE FOUND CRACKED AT THE SMALLER OF THE TWO TORQUE LINK ATTACH LUGS. THE RT WAS REPLACED WITH A USED SERVICEABLE UNIT, HOWEVER 10 USED LT UNITS WERE TESTED AND FAILED PRIOR TO FINDING A SERVICEABLE USED ONE TO INSTALL. WE FEEL FINDING A GOOD USED RT UNIT ON THE FIRST TRY WAS JUST A STROKE OF LUCK.
CESSNA CONT BELLCRANK CRACKED 03/10/2003
310Q IO470VO 59420011 NLG STEERING 2003041600127
(CAN) UPON INSPECTION, FOUND STEERING BELLCRANK CRACKED IN RADIUS, SEVERAL LOCATIONS. NOTE: THE NEW BELLCRANK INSTALLED IS A HEAVIER UNIT.
CESSNA CONT CONTROL FRAYED 02/27/2003
337G IO360GB 14601007 TE FLAPS 2003041500126
(CAN) DURING 100 HR INSPECTION THE INBOARD RIGHT HAND FLAP CABLE WAS INSPECTED FOR WEAR IN THE AREA OF THE INBOARD FLAP BELLCRANK. CABLE WAS FOUND FRAYED APPROX. 1 INCH FROM CABLE END ATTACH FITTING. CABLE REPLACED.
CESSNA CONT ROD END SEPARATED 01/13/2003
340CESSNA TSIO520K S29991 MIXTURE 2003040100168
(AUS) MIXTURE CONTROL SYSTEM ROD END FAULTY.
CESSNA CONT OIL COOLER CRACKED 02/09/2003
402B TSIO520E 636900 ENGINE OIL 2003041600081
(CAN) WE DISCOVERED CRACKS DEVELOPING AROUND WELDS ON THE ATTACHING POINTS OF THE OIL COOLER. INSTALLATION PROCEDURE INCLUDING TORQUE, AND ALL THE ATTACHING HARDWARE, WERE CORRECTLY
CESSNA CONT VENT LINE CHAFED 09/17/2002
414A TSIO520* 51001101 LT WING 2003041100149
FUEL RUNNING OUT OF LT VENT WHEN TOPPED OFF. INSP REVEALED LEFT VENT TUBE HAD A HOLE CHAFED IN IT BY FUEL FILLER PORT SCREEN. THIS AIRCRAFT HAD RAM WINGLETS INSTALLED SEVERAL HOURS BEFORE THIS OCCURRED. LINE MAY HAVE BEEN BENT DURING THIS INSTALLATION, CAUSING LINE TO CHAFF ON FILLER PORT SCREEN. INSPECTED RIGHT SIDE WITH NO CHAFING FOUND. RECOMMEND THIS LINE TO BE INSPECTED WHEN FUEL TANKS ARE OPENED, OR VISUAL INSPECTION THROUGH FILLER PORT.

CESSNA CONT LINE BLOCKED 01/22/2003
421B GTSIO520H MANIFOLD 2003040100186
(CAN) ON GROUND WARM UP AND RUN ALL WAS NORMAL, ON TAKEOFF RT MANIFOLD STAYED AT 28. 5 INCHES, ALL OTHER INDICATIONS AND ENGINE FUNCTIONS NORMAL. TAKEOFF ABORTED AND AIRCRAFT RETURNED TO HANGAR. MANIFOLD LINE FOUND BLOCK IN WING SECTION BETWEEN WING AND A/F. MOISTURE REMOVED TESTED FOUND SERVICEABLE. NOTE OUTSIDE AIR TEMP AT -29 DEGREES C AND AIRCRAFT WAS IN HANGAR PRIOR TO FLIGHT.
CESSNA CONT STARTER INTERMITTENT 01/29/2003
421C GTSIO520L 10357487242 ENGINE 2003040100191
(CAN) FLIGHT CREW REPORTED THAT THE RIGHT HAND ENGINE WOULD INTERMITTENTLY 'SHUDDER'. THE FLIGHT CREW SECURED THE ENGINE AND THE AIRCRAFT RETURNED TO BASE UNEVENTFULLY. A DETAILED INSPECTION OF THE ENGINE AND IGNITION SYSTEM REVEALED THAT THE STARTING VIBRATOR WAS INTERMITTENTLY ACTIVATING. ACTIVATION OF THE STARTER VIBRATOR GROUNDS THE PRIMARY POINTS IN THE MAGNETOS AND UTILIZES THE SECONDARY POINTS IN THE LEFT HAND MAGNETO TO ADVANCE THE TIMING FOR STARTING. THERE HAVE BEEN NO FURTHER REPORTED INSTANCES OF MALFUNCTION SINCE THE STARTING VIBRATOR WAS REPLACED.
CESSNA GARRTT SKIN DELAMINATED 01/10/2002
441 TPE331* 58250057 TE FLAPS 2003041500069
(CAN) THE LT INBOARD FLAP WAS DISCOVERED PARTIALLY SEPARATED ON THE TOP SURFACE OF THE COMPOSITE STRUCTURE WHERE A NONCONFORMANCE REPAIR (AS INDICATED IN THE APPLICABLE MANUAL) WAS CARRIED OUT. THIS REPAIR SEEMS TO HAVE BEEN DONE WITHOUT ANY DOCUMENTATION. THE RT INBOARD FLAP IS STARTING TO DELAMINATE. IT HAS NO TRACES OF WORK CARRIED OUT ON THE FLAP SURFACE. THE DELAMINATED SURFACE IS IN THE SAME LOCATION AS THE LT FLAP.
CESSNA PWA BELLCRANK CRACKED 02/28/2003 8260
501 JT15D1A 55651012 RT IB FLAP 2003041000032
RIGHT FLAP BELLCRANK FOLLOW-UP ROD ARM ATTACH POINT WAS CRACKED ON UPPER AND LOWER ARM. UPON INSPECTION OF OTHER BELLCRANKS; FOUND THAT SPACERS WERE MISSING BETWEEN FOLLOW-UP ROD-END AND BELLCRANK FOLLOW-UP ARM.
CESSNA PWA ARM CRACKED 02/20/2003
550 JT15D4 556555026 COUNTER WEIGHT 2003041600085
(CAN) DURING ROUTINE MAINTENANCE INSPECTION OF THE CONTROL COLUMN, A CRACK WAS FOUND IN THE BOB WEIGHT ARM NEAR THE HOLE WHERE THE ARM IS ATTACHED TO THE ELEVATOR TORQUE TUBE. BOB WEIGHT ARM
CESSNA PWA BEARING FAILED 02/20/2003
550 JT15D4 23080025 STARTER GEN 2003041600096
(CAN) AT FLIGHT LEVEL 33, 000 FT A POPPING SOUND FOLLOWED BY ENGINE VIBRATIONS WAS EXPERIENCED. RT POWER LEVER RETARDED SLOWLY AND VIBRATION LEVEL SOFTENED, BUT, STILL NOTICEABLE, ALL ENGINE PARAMETERS WERE NORMAL AND STEADY. AT 73 PERCENT ON DECENT THROUGH 29000 FT A STRONG VIBRATION BEGAN. THE RT LEVER SET TO 67 PERCENT THE VIBRATION WAS STILL NOTICEABLE. AT 9, 000 FT THE POWER LEVER WAS RETARDED TO 58 PERCENT. LANDED AND SHUTDOWN ENGINE. NR 2 STARTER GENERATOR REMOVED DUE TO BEARING
CESSNA PWA ANTENNA SEPARATED 03/28/2003 939
550 PW530A VERTICAL STAB 2003041100150
THE HF ANTENNA BROKE OFF DURING FLIGHT, FROM THE VERTICAL STABILIZER TENSION UNIT. THE ANTENNA CABLE SLAPPED AGAINST THE TAILCONE, CHIPPING PAINT. NO STRUCTURAL DAMAGE FOUND.
CESSNA CONT CONTROL FRAYED 02/20/2003
A185E TSIO520T 051010532 AILERON 2003041600095
(CAN) AILERON DIRECT CABLE FRAYED AT NYLON PULLEYS IN CABIN ROOF AREA
CESSNA CONT WIRE OVERHEATED 11/28/2002
A185F IO520D 5136738 RADIO MASTER 2003040100204
(CAN) LUG IMPROPERLY CRIMPED TO WIRE PA-6 AT RADIO MASTER SWITCH CAUSING AN OVERHEAT SITUATION WITH EVENTUAL SEPARATION OF WIRE FROM LUG. WIRE WAS ORIGINAL FROM CESSNA FACTORY INSTALLATION.
CESSNA CONT RIB CRACKED 03/19/2003
A185F IO520D 052323178 FLAP TRACK 2003041600126
(CAN) DURING 200 HR INSPECTION THE INBOARD FLAP TRACK BRACKETS FOR THE CLOSING SKIN WHERE FOUND CRACKED. DURING REPLACEMENT OF THESE BRACKETS IT WAS DISCOVERED THAT THE LOWER CORNER OF THE RIBS WHERE ALSO CRACKED. BOTH INBOARD AND OUTBOARD RIBS ON THE FELT INBOARD FLAP TRACK WHERE FOUND CRACKED AND THE INBOARD RIB ON THE RT INBOARD FLAP TRACK WAS FOUND CRACKED. CRACKS MOST LIKELY CAUSED FROM REPEATED CYCLES AND OR HIGH FLAP EXTENSION SPEEDS. NOTE ON THIS AIRCRAFT THE LOWER FLAP SKINS WHERE ALSO CHANGED DURING THIS INSPECTION DUE TO CRACKS IN THE TRAILING EDGE SKINS.
CESSNA CONT HINGE CRACKED 02/28/2003
A185F IO550D 07321014 STABILIZER 2003041500127
(CAN) DURING ROUTINE SCHEDULED MAINTENANCE, IT WAS DISCOVERED THAT THE REINFORCEMENTS - STABILIZER HINGE WERE CRACKED. P/N 0732101-4 REPLACED WITH NEW PARTS.
CESSNA LYC SLIP JOINT WORN 01/25/2002 445
T206H TIO540AJ1A 12509921 EXHAUST STACK 2003041000053
THERE IS AN EXHAUST ELBOW THAT COMES OFF THE WASTEGATE AND RETURNS TO THE TAILPIPE. THIS PIPE HAD WORN NEARLY THROUGH AT THE SLIP JOINT BETWEEN IT AND THE TAIL PIPE. THE TAIL PIPE WAS WORN TO A SHARP EDGE WHERE THE ELBOW ENTERS THE SLIP JOINT. THIS CONDITION WAS NOT VISIBLE UNTIL THE TAILPIPE WAS REMOVED. PROBABLE CAUSE IT THE VIBRATION BETWEEN THE TWO PIPES. THE TAILPIPE NEEDS TO BE REMOVED EVERY 200 HOURS TO INSPECT THIS JOINT FOR DAMAGE. UNDETECTED, THIS EXHAUST PIPE WOULD HAVE FAILED IN A FEW MORE HOURS. THIS FAILURE COULD HAVE CAUSED AN IN-FLIGHT FIRE AND POSSIBLE LOSS OF LIFE.
CESSNA CONT ALTERNATOR SEIZED 04/01/2003
T210M TSIO520* E3FF103000AA ENGINE 2003041100156 398
UPON FIRST START OF THE DAY A LOUD SQUEALING NOISE WAS HEARD ALONG WITH WHITE SMOKE EXITING THE COWL FLAPS AND THE PILOT SHUT DOWN ENGINE. UPON REMOVING THE COWLING IT BECAME OBVIOUS THAT THE ALTERNATOR HAD SEIZED AND THAT THE BELT WAS BADLY BURNED. LATER EXAMINATION BY THE MECHANIC REVEALED THAT A DIODE BLOCK SCREW HAD VIBRATED LOOSE AND WEDGED BETWEEN THE ROTOR AND STATOR AFTER SHUT DOWN FROM THE PREVIOUS DAYS FLIGHT.
CIRRUS SEAT BELT INOPERATIVE 03/06/2003
SR20 5049074058013 COCKPIT 2003041000063
THIS ISSUE INVOLVES SEATBELTS INSTALLED ON AIRCRAFT. THE TENSIONER BAR ON LAP BOLT WILL NOT HOLD TENSION ON BELTS ONCE TIGHTENED. BELTS ARE LOOSENING DUE TO VIBRATION IN FLIGHT. THE TENSION BAR IS SMOOTH, SO IT IS NOT HOLDING TENSION. REDESIGN TENSIONER BAR. CNDAIR GE CONTROL FAILED 02/14/2003
CL6002B19 CF343A1 600911787 AILERON 2003041000019
(CAN) AILERON CONTROL JAM. ACTION QRH ESTABLISHED THAT PILOT SIDE WAS OPERATING CHANNEL. CONTROL ON CO-PILOT AILERON, FULL CONTROL FOR AILERON UP. AILERON MOTION FROM APPROX NEUTRAL AND DOWN NON EXISTENT. CONTROL ON CAPTAIN SIDE WAS FULL AND FREE. FOUND RT AILERON QUADRANT AT RT WHEEL WELL, LOWER CONTROL CABLE GUARD PIN LOW CLEARANCE WITH QUADRANT. DAMAGE AT TIP OF THAT GUARD PIN, WHICH WAS MISORIENTED, WAS STOPPING THE MOTION WHEN TRYING TO MOVE AILERON DOWN. NEW GUARD PIN INSTALLED IAW DWG 600-91014 AND BAPS 164-001. NO DAMAGE WAS FOUND AND INTEGRITY OF AILERON CONTROL SYS WAS CARRIED OUT ON THE RT SIDE, EVERYTHING CHECKED SERVICEABLE. AIRCRAFT WAS RELEASE FOR FLIGHT. NO

CNDAIR GE FEEL UNIT ROUGH 01/22/2003
CL604 CF343B1 6009230053 PITCH 2003040100189
(CAN) CREW STATED THAT ON TAKEOFF, EXCESSIVE FORCE (AS COMPARED TO NORMAL TAKEOFF FORCE) WAS REQUIRED TO PULL THE YOKE BACK FOR TAKEOFF. CREW STATED THAT THE REQUIRED FORCE WAS SUCH THAT THEY CONSIDERED ABORTING TAKEOFF, BUT DID NOT. CREW ALSO NOTED THAT THE FORCE HAD A BREAKAWAY POINT, IN THAT PULLING THE YOKE BACK WAS DIFFICULT FOR A PERIOD OF TIME, THEN SEEMED TO SPRING FREE AND BECAME NORMAL. SUBSEQUENT TROUBLESHOOTING ON THE GROUND LED THE MAINTENANCE CREW TO USE THE PITCH DISCONNECT MECHANISM AND ISOLATE THE PITCH FEEL SIMULATOR (PFS). IT WAS FOUND THAT THE LEFT PFS HAD SOME ROUGHNESS AND JERKINESS. BOTH LT AND RT PFS UNITS WERE REPLACED.
ENSTRM LYC LINE BROKEN 01/04/2002
280C HIO360E1AD 281210081 FUEL SYSTEM 2003041100147
THE TUBE FAILED INSIDE THE FERRULE ON THE ENGINE DRIVEN FUEL PUMP FITTING DUE TO RUBBING AND VIBRATION. FAILURE WAS FOUND AFTER PILOT COMPLAINED OF LOW M. A. P. , ABOUT 2 IN HG, AT MAXIMUM OPERATING PERIMETERS, AND FUEL CONSUMPTION LOW.
ENSTRM LYC LINE BROKEN 01/04/2002 1650
F28F HIO360F1AD 281210081 FUEL PUMP 2003041100148
THE TUBE FAILED ADJACENT TO FERRULE ON THE ENGINE DRIVEN FUEL PUMP FITTING. FAILURE WAS FOUND UPON REMOVAL OF THE PART FROM THE AIRCRAFT TO PERFORM OTHER MAINTENANCE. RECOMMEND CHANGING THIS RIDGED LINE TO A FLEXIBLE LINE;
GROB HORN LOOSE 02/26/2003 4500
G103A ELEVATOR 2003041000057
ON ANNUAL INSPECTION FOUND ELEVATOR HORN LOOSE. HORN IS BOLTED TO TWO INBOARD SOLID RIBS OF ELEVATOR. IT IS NOW BROKEN LOOSE FROM THESE TWO RIBS. THIS IS A VERY SERIOUS CONDITION, NEEDS TO BE CHECKED. THIS AIRCRAFT IS STORED OUTSIDE.
GROB SKIN DELAMINATED 02/28/2003 4500
G103A LT ELEVATOR 2003041000058
ON ANNUAL INSPECTION, FOUND LEFT ELEVATOR LOWER SKIN DELAMINATED IN TWO PLACES. TOW BLISTERS APPROXIMATELY ONE FOOT LONG. ELEVATOR WAS REMOVED AND SENT OUT FOR REPAIR.
GROB SELECTOR FAILED 03/18/2003 692
G120A 120A6229 FUEL SYSTEM 2003041100165
DURING A PROGRESSIVE INSPECTION, TECH FOUND THE FUEL SELECTOR VALVE LOOSE AND HARD TO TURN. PROBABLE CAUSE IS INTERNAL FAILURE.
GROB LYC BEARING FAILED 04/07/2003 640
G120A AEIO540D4A5 120A4125 AILERON LEVER 2003041700182
DURING PROGRESSIVE INSPECTION OF THE AIRCRAFT THERE WAS A STRANGE SOUND FROM THE AILERON SYSTEM. FURTHER INVESTIGATION REVEALED THAT THE BEARING FROM THE LT AILERON ASSEMBLY WAS COMING APART. PROBABLE CAUSE IS DESIGN OF AILERON LEVER ASSEMBLY. THE ANGLE AND THE AMOUNT OF USE OF THIS SYSTEM.
GROB LYC UPLOCK INOPERATIVE 03/17/2003
G120A AEIO540D4D5 BAD10500 MLG 2003041100164
DURING FLIGHT GEAR ON LT SIDE WOULD NOT RELEASE. FLIGHT CREW HAD TO PERFORM EMERGENCY EXTENSION AND PULL G'S TO RELEASE GEAR. TROUBLE SHOOT SYSTEM AND FOUND LEFT GEAR UPLOCK WOULD NOT RELEASE GEAR. REPLACED UPLOCK ASSY. RIGGING WAS OUT OF LIMIT. PROBABLE CAUSE IS DESIGN OF UPLOCK ASSY INSTALLATION. RECOMMENDATION IS TO C/W SB.
HUGHES ALLSN TUBE LEAKING 02/05/2003
369D 250C20B 369H8407 BLEED AIR 2003040100433
(CAN) HARD TO START ENGINE. FIRST START OF DAY, CAUSED HUNG STARTS AT 50-55 PERCENT N1. NO TOT INCREASE WHEN HEATER VALVE OPENED. SERVICEABLE HOSE INSTALLED.
LEAR ALIDSG TERMINAL OVERHEATED 02/17/2003
55LEAR TFE7313AR TB1 EMERGENCY LIGHT 2003040200151
(CAN) MFG DESIGN FLAW, INSTRUMENT LIGHTING SYS WAS DISCOVERED WHEN NEW AIR DATA DISPLAY UNIT WAS INSTALLED FOR RVSM UPGRADE. SYMPTOM WAS ADDU LIGHT WOULD GO INTO NIGHT MODE (VERY DIM) WHEN EMER BATT PACK WAS TURNED ON. PACK IS KEPT ON IN FLIGHT TO RUN STANDBY GYRO. PROBLEM WAS THAT IN NON-EMER MODE, EMERGENCY PACK WAS POWERING WHOLE 5 VOLT INSTRUMENT LIGHTING BUS VIA RELAY K2 AND CR4 ON TB1 IN CIRCUIT BOARD UR-1. 2. 2 AMP DRAW THROUGH CR4 WOULD CAUSE IT TO OVERHEAT BUT IN TURN DROP VOLTAGE LOW ENOUGH THAT LAMP LIGHTING WAS TOO DIM TO BE NOTICED. PROBLEM WENT UN-NOTICED UNTIL RVSM MOD WAS DONE. MFG WAS NOTIFIED OF PROBLEM, SENT WIRING MOD TO SYS.
LET LEG ASSY BROKEN 03/01/2003 1500
L13BLANIK MLG 2003041000067
LEG THAT HOLDS MLG FORK ASSEMBLY. HAD STRAIGHT BREAK. APPEARS TO BE FATIGUE FAILURE. MAY HAVE BEEN CAUSED BY TAKING OFF FROM GRASS AT ANGLE TO PAVED RUNWAY AND CONSTANT HITTING OF 2-3 INCHES NEWLY PAVED RUNWAY. RECOMMEND TAKING OFF ON PAVED RUNWAY, HAND PULL GLIDER OVER BUMP.
MAULE LYC CONTROL WORN 03/07/2003 844
M5235C O540* 31713 ELEVATOR 2003041000051
FOUND ELEVATOR DOWN CABLE AT F/W BELLCRANK WITH BROKEN STRAND AND WEARING AT POINT OF CONTACT. FOUND WHILE COMPLYING WITH MFG SB NR 64, DURING ANNUAL INSPECTION. REPLACED CABLE WITH NEW PART.
MAULE LYC FABRIC FAULTY 01/31/2003
MX7180 O360C1F CECONITE101 FUSELAGE 2003040100149
(AUS) FUSELAGE AND EMPENNAGE FABRIC COVERING FAULTY. THE 76. 2MM (3IN) LINEAR STRAIGHT AND PINKED TAPES COULD BE REMOVED BY LIGHTLY HOLDING THE TAPE BETWEEN THUMB AND FOREFINGER AND WALKING AWAY FROM THE AIRCRAFT REMOVING THE COMPLETE FUSELAGE LENGTH. TAPES FROM THE TAILPLANE WERE HANGING ON THE GROUND. DOPE DISPLAYED POOR PENETRATION AND ADHESION. THE PAINT USED WAS EXTREMELY BRITTLE AND DID NOT APPEAR TO CONTAIN ANY ELASTIC ADDITIVE.
MAULE LYC BOLT WRONG PART 01/31/2003
MX7180 O360C1F 2003040100150
(AUS) THE MAJORITY OF THE BOLTS USED IN THE AIRCRAFT ARE AN TYPE BOLTS WITH A DRILLED SHANK COMBINED WITH A SELF LOCKING NUT. UNAPPROVED PART. PERSONNEL/MAINTENANCE ERROR.
MOONEY LYC MOUNT BROKEN 03/16/2003 3432
M20C O360* 590000509 ENGINE 2003041000037 45
DURING ANNUAL INSPECTION AND AD 75-09-08 COMPLIANCE, FOUND LOWER RT CORNER WELD JUNCTION FULLY BROKEN AND SEPARATED. SB M20-175 & M20-192 HAD NOT BEEN COMPLETED, THAT WAS DESIGNED TO BE PREVENTED BY INSTALLING GUSSET AT THIS CORNER (P/N 590041-1). MOUNT WAS FOR 180 HP ENGINE AND NOT
MOONEY LYC COUPLING FAILED 02/25/2003
M20C O360* B10006 MLG MOTOR 2003041000059
B100-06 RUBBER DRIVE COUPLING BETWEEN LANDING GEAR MOTOR AND TRANSMISSION, ABSORBS SHOCK WHEN LANDING GEAR REACHES ITS LIIT, THIS IS THE ONLY CONNECTION BETWEEN TRANSMISSION AND GEAR LINKAGE, WHEN THIS PART FAILED, YOU CANNOT PERFORM ANY GEAR EXTENSION, ELECTRICALLY OR MECHANICALLY. RECOMMEND TO REPLACE EVERY 200 HOURS TO COINCIDE WITH 200 HOUR TRANSMISSION GEAR BACKLASH

MOONEY LYC CASE CRACKED 03/05/2003 2370
M20J IO360A3B6 IO360A3B6D PROPELLER 2003041000040 689
AT 689 HOUR TSO OF ENGINE AND 689 HOURS SINCE REMOVAL OF 2 BLADE PROPELLER AND INSTALLATION OF 3 BLADE PROPELLER IAW STC. CASE CRACKED CAUSING AN OIL LEAK. THE CASE WAS NOT REPAIRABLE.
MOONEY LYC MAGNETO LOOSE 04/01/2003 1950
M20J IO360A3B6 D4LN3000 ENGINE 2003041100146 180
AIRCRAFT EXPERIENCED ENGINE FAILURE AFTER TAKE-OFF, PILOT LANDED AIRCRAFT WITH MAIN LANDING GEAR RETRACTED. AIRCRAFT RECEIVED CONSIDERABLE DAMAGE FROM LANDING. ENGINE UPPER COWLING REMOVED FOR INVESTIGATION OF ENGINE FAILURE. DURING INSPECTION OF ENGINE FOUND MAGNETO DISENGAGED FROM ACCESSORY CASE, ALL MOUNTING HARDWARE MISSING. REVIEW OF MAINTENANCE LOGBOOKS REVEALED AD 96-12-07 IMPULSE COUPLING INSPECTION COMPLIED 06 APRIL, 2001. MAGNETO HAS 180. 1 HRS SINCE LAST INSPECTION. OIL CHANGE COMPLETED 27 JANUARY, 2003.
PILATS PWA CONTROL FAILED 08/13/2002
PC1245 PT6A67B FLAP SYSTEM 2003041000028
(CAN) AFTER TAKEOFF THE PILOT SELECTED FLAPS UP. A FLAP WARNING LIGHT ILLUMINATED AND THE FLAPS DID NOT MOVE. (FLAPS REMAINED AT 15 DEGREES). THE PILOT RETURNED TO LAND AT THE AIRPORT WITHOUT INCIDENT. A FLAP RESET WAS CARRIED OUT ON THE GROUND SERVICEABLE.
PILATS PWA GUIDE FAILED 12/12/2002
PC1245 PT6A67B 5322012200 MLG 2003041500128
(CAN) LOUD UNUSUAL SOUND FROM NOSE GEAR WHEN SELECTED DOWN. - FOUND NOSE GEAR OLEO NOT EXTENDING COMPLETELY. - NOSE LANDING GEAR FORK RUBBED ON NOSE GEAR DOOR ACTUATING ROD.
PILATS PWA WIRE CHAFED 02/24/2003
PC1245 PT6A67B BOOST PUMP 2003041600083
(CAN) A FUEL BOOST PUMP WAS REPLACED FOR ITS SCHEDULED OVERHAUL REPLACEMENT AT 3500 HOURS. A WIRE WAS FOUND CHAFED TO BARE WIRE THROUGH ROUGHLY MIDWAY OF THE MANUFACTURER SUPPLIED HARNESS. THIS COULD HAVE THE POTENTIAL TO IGNITE THE FUEL TANK IF SPARKS WERE PRESENT. DUE TO THE LENGTH OF WIRE, IT IS POSSIBLE FOR THE HARNESS TO RUB ON A COUPLE OF DIFFERENT PLACES, IE: BONDING STRAP, RIB, TOP OF PUMP. PILATUS WAS CONTACTED WITH THE PROBLEM AND WE REQUESTED A MEANS TO PROTECT THE HARNESS.
PILATS PWA HOSE LEAKING 02/18/2003
PC1245 PT6A67B 5302412123 ANTI ICE SYS 2003041600087
(CAN) EXHAUST STAINING WAS NOTED COMING FROM LT INTAKE LIP DE-ICE AREA. SUBJECT HOSE (SEAL)WAS FOUND TO BE LEAKING WHERE THE LT PIPE COMES DOWN FROM THE EXHAUST STACK AND JOINS WITH THE LIP DEICE PART. HOSE REPLACED WITH NEW.
PILATS PWA ACTUATOR SEIZED 03/13/2003
PC1245 PT6A67B PITCH TRIM 2003041600129
(CAN) FLIGHT CREW HAD A AUTOPILOT DISCONNECT IN CRUISE FLIGHT THEY SHUT DOWN AUTOPILOT SYSTEM AND CONTINUED FLIGHT HOME. MAINTENANCE TESTED AUTOPILOT SYSTEM AFTER RESETTING C/B AND SYSTEM WORKED AS PER M/M. THEY THEN CARRIED OUT THE TEST ON THE HORIZONTAL STAB TRIM, WHEN THEY GOT TO THE PROCEDURE TO TEST THE ALTERNATE TRIM THEY FOUND IT TO BE U/S. FURTHER INSPECTION REVEALED THAT THE SECONDARY MOTOR WAS SEIZED. A REPLACEMENT UNIT WAS INSTALLED AND TESTED SERVICEABLE. PITCH TRIM ACTUATOR HAD 808. 7 HR S AND 890 CYCLES. THIS IS THE SECOND FAILURE WE HAVE HAD ON THESE UNITS WITH
PILATS PWA CONNECTOR SHORTED 03/19/2003
PC1245 PT6A67B CSU 2003041600144
(CAN) DURING FLIGHT, PILOT REPORTED THAT NP RPM INDICATION WAS FLUCTUATING. NP WOULD DROP TO AROUND 1620 FOR A FEW SECONDS & THEN IT WOULD RETURN TO IT'S CONSTANT SPEED RANGE OF AROUND 1700. FLUCTUATIONS LASTED FOR ABOUT 20 MINUTES. TORQUE & FUEL FLOW WERE CONSTANT & NO SURGING WAS FELT BY PILOT. PILOT LANDED AT NEAREST AIRPORT. NP INDICATION SYS WAS INSPECTED, & RPM CONNECTOR CLEANED ON CSU. A/C WAS GROUND RUN AND NP INDICATIONS WERE NORMAL AND CONSTANT. A/C RETURNED TO BASE. RETURN FLT, & FURTHER INVESTIGATIONS & GROUNDS RUNS AT BASE, NP SYSTEM FUNCTIONED NORMALLY. AFTER 22 HOURS OF FLIGHT OPERATION, PROBLEM HAS NOT RETURNED. BELIEVE THE PROBLEM WAS RPM CONNECTOR ON CSU, SINCE
PIPER LYC TUBE CRACKED 03/31/2003
PA23250 TIO540C1A 1742002 MLG 2003041600163
(CAN) THREE CRACKS WERE FOUND ON THE RT MLG OUTBOARD TUBE ASSEMBLY OF THE DRAG LINK FITTING SUPPORT. THE CRACKS ARE LOCATED AROUND THE LOWER MOUNTING BOLT HOLE OF THE TUBE ASSEMBLY. AFTER REMOVAL OF THE DRAG LINK SUPPORT ASSEMBLY, THE FORWARD SUPPORT FITTING WAS FOUND WITH TWO CRACKS ALONG THE EACH SIDE OF THE CASTING SEAM TO THE MOUNTING BOLT HOLE.
PIPER LYC EXHAUST FAILED 10/24/2002
PA28140 O320E2A LW19001 NR 3 CYLINDER 2003041100168
A/C EXPERIENCED SUDDEN LOSS OF POWER, LANDED SAFELY ON COUNTRY ROAD. INVESTIGATION FOUND NR 3 CYLINDER LOST 75 PERCENT OF EXHAUST VALVE FACE THAT SUBSEQUENTLY TRAVELED THROUGH THE INDUCTION SYSTEM TO REMAINING CYLINDERS. BROKEN VALVE PARTS FORCED SPARK PLUG TIPS TO CRUSH TO A NO GAP CONDITION. NR 1 CYLINDER HAD BOTH PLUGS CRUSHED, NR 2 HAD ONE PLUG CRUSHED, ENGINE BASICALLY RAN ON 2 CYLINDERS. PN OF VALVE LW OR SL19001. ENGINE REPLACED, TEST RUN OPS REVEALED INADEQUATE COOLING TO THE NR 3 CYL WITH SAME BAFFLING AS FAILED ENG. CHT IND REVEALED TEMPS TO BE ABOVE 420 DEGREE TEMPERATURE DROP IN OPERATION. SUSPECT HIGH CHT TEMP CAUSED SHORT LIFE SPAN OF VALVE.
PIPER LYC LIGHT BURNED OUT 02/22/2003 25
PA28236 O540* GS23614 CABIN 2003041000038
SPT GLOW STRIPS, INSTALLED CUSTOMER SUPPLIED ELECTRO LUMINESCENT LAMPS UNDER INSTRUMENT PANEL GLARE SHIELD, WITHIN 25 HOURS OF AIRCRAFT OPERATION, BOTH LIGHT FAILED. DURING INSPECTION OF THE LAMPS, TURNED POWER ON AND BOTH LAMPS SPARKED AND SMOKE CAME FROM AREA OF PLASTIC CONNECTORS. REMOVED BOTH LAMPS. BOTH FAILED IN SAME LOCATION WENT IN MINUTES AFTER INSTALLATION. SUGGEST THESE LAMPS NOT BE USED OR INSTALLED IN ANY AIRCRAFT UNTIL MFG CAN FIND A BETTER CONNECTOR.
PIPER LYC CARBURETOR SCORED 03/11/2003 1142
PA28R201 IO360C1C6 2576532 ENGINE 2003041000060
THE CREW REPORTED A ROUGH/IRREGULAR SOUND FROM THE ENGINE IN CRUISE. THE CREW RETURNED TO THE RAMP. IT IS NOT UNCOMMON FOR THIS SITUATION TO OCCUR NOT ONLY DURING INSPECTION GROUND RUNS, BUT ALSO DURING OPERATION BETWEEN INSPECTIONS. A COMMON SOURCE OF PROBLEMS WITH THIS FUEL CONTROL IS THE MIXTURE VALVE. THIS VALVE BECOMES SCORED AND THEN INACCURATE IN ITS FUNCTION. THERE IS A PROCEDURE FOR LAPPING THIS VALVE SURFACE.
PIPER LYC CARBURETOR INACCURATE 03/17/2003
PA28R201 IO360C1C6 25765362 ENGINE 2003041000061
THE CREW REPORTED A ROUGH IDLE DURING GROUND OPERATION. THIS ENGINE/AIRCRAFT COMBINATION HAS BEEN THE SUBJECT OF AN AD REGARDING UNSTABLE IDLE/MIXTURE ISSUES. IT IS NOT UNCOMMON FOR THIS SITUATION TO OCCUR NOT ONLY DURING INSPECTION GROUND RUNS, BUT ALSO DURING OPERATION BETWEEN INSPECTIONS. THE IDLE SYSTEM ON THIS FUEL CONTROL UNIT HAS ISSUES, WHERE IT REQUIRES CONSIDERABLE ADJUSTING WITHIN A RELATIVELY FEW NUMBER OF OPERATING HOURS.
PIPER LYC PIPER CLAMP BROKEN 03/17/2003
PA31 TIO540A2B 557584 TAIL PIPE 2003041600132
(CAN) THE MULTI SEGMENTED CLAMP WAS FOUND TO HAVE FLANGES BROKEN OFF THREE OF THE SEGMENTS. FORTUNATELY, THE REMAINING SEGMENT HELD THE TAILPIPE IN PLACE.

PIPER	LYC	PLUG	UNDERTORQUED	03/17/2003	60
PA31300	IO540M1A5	STD1339	OIL PUMP BODY	2003041000064	

COMPLIANCE WITH MFG SB 555, OIL PUMP BODY PLUG INSPECTION, BOTH ENGINES CHECKED AND FOUND UNDERTORQUED. RETORQUED IAW SB. RETURNED TO SERVICE WITHOUT INCIDENT. (SHOULD MAKE MANDATORY

PIPER	PWA	TORQUE TUBE	CORRODED	03/20/2003	12087
PA31T	PT6A28		RUDDER	2003041600128	

(CAN) DURING INSPECTION OF THE RUDDER TORQUE TUBE ASSY FOR CORROSION IAW PIPER SERVICE BULLETIN 1105 IT WAS DETERMINED THAT THE TORQUE TUBE HAD EXTERNAL CORROSION. THE TUBE WAS REMOVED TO ACCESS THE AMOUNT OF CORROSION AND IF IT COULD BE REMOVED AND TREATED. THE AMOUNT OF EXTERNAL SURFACE CORROSION WAS MINIMAL. THE INSIDE OF THE TORQUE TUBE WAS INSPECTED WITH A BOROSCOPE WHICH IS NOT CALLED FOR IN THE SERVICE BULLETIN AND WAS FOUND SEVERELY CORRODED. PIPER AIRCRAFT WAS NOTIFIED AND THE TORQUE TUBE WAS REPLACED WITH NEW. THE OWNER HAS POSSESSION OF THE CORRODED TORQUE TUBE.

PIPER	LYC	PLACARD	MISMARKED	01/28/2003	
PA32300	IO540K1A5	753690	ENGINE	2003040100332	

(CAN) ENGINE MAGNETO TIMING DIFFERS FROM ENGINE DATA PLATE VERSES AIRFRAME SERVICE MANUAL. ENGINE DATA PLATE CALLS FOR 20 DEGREES BTC AND THE AIRFRAME MANUAL SAYS 25 DEGREES BTC. THERE ARE SEVERAL LYCOMING SBS REGARDING ENGINE DAMAGE FROM INCORRECT TIMING. WE CONTACTED BOTH THE ENGINE MANUFACTURER AND THE AIRFRAME MANUFACTURER, ATTACHED IS THE REPLY FROM THE AIRFRAME MANUFACTURER. THEY WILL CHANGE THE SERVICE MANUAL.

PIPER		BOLT	SHEARED	04/04/2003	
PA44180		NAS464P427	NLG DRAG LINK	2003041600018	

(CAN) CENTER NOSE GEAR DRAG LINK BOLT FOUND SHEARED BUT STILL IN PLACE DURING 100 HR. INSPECTION.

PIPER		CONTROL ROD	CORRODED	03/25/2003	2437
PA60602P		6000050507	RT AILERON	2003041000030	

RT AILERON PUSH PULL TUBE CORRODED SEVERELY. HOLE WORE THROUGH. LOCATED BEHIND ENGINE. RECOMMEND SPECIAL ATTENTION BE PAID TO THIS AREA DURING INSPECTIONS.

SKRSKY	PWA	LINE	FROZEN	03/08/2003	
S64E	JFTD12A4A		P3 SENSING	2003041600173	

(CAN) A/C WAS COVERED IN SNOW AND ICE & REQUIRED EXTENSIVE PREHEATING. ENGS WERE STARTED & NR 1 ENG TOOK LONGER TO LIGHT OFF. ONCE ALL WAS IN GREEN, A/C LIFTED OFF. APPROX. 10 MINS INTO 1ST CYCLE, CREW NOTICED ENGS WERE UNMATCHED. ATTEMPTED TO MATCH THEM USING BEEPER TRIM FOR EACH ENG, UNSUCCESSFUL. ATTEMPT TO THROTTLE BACK FAILED BECAUSE THROTTLE LEVERS FROZEN. LOGS RELEASED & NR 1 ENG SURGED, OVERSPEED PROTECTION SHUT ENG DOWN. WITH ENG SHUTDOWN, ABLE TO GET VERTICAL BOUNCE UNDER CONTROL. NR 1 ENG WAS SECURED & A/C RETURNED & LANDED. INSPECTION OF ENG AND ITS CONTROL LINKAGES REVEALED ICE IN ENG P3 SENSE LINE & AN N2 BEEP MOTOR INOP. BEEP MOTOR REPLACED. ENG FCU WAS

SNIAS	TMECA	BELT	BROKEN	03/05/2003	
AS350BA	ARRIEL1B	704A33690004	HYD PUMP	2003041000026	

(CAN) AFTER THE PILOT PERFORMED HIS HYD PRESSURE TEST, (HYDRAULIC PRESSURE) LIGHT CAME ON. ON DI THE NIGHT BEFORE AND ON THE DAY OF INCIDENT, THE BELT.

SNIAS	TMECA	BELT	BROKEN	02/21/2003	
AS350BA	ARRIEL1B	704A33690004	HYD PUMP	2003041000072	

(CAN) BELT BROKE BEFORE TAKE OFF. FOUND TO HAVE BROKEN AT THE SEAM. PULLEY AND PUMP WERE CHANGED AT THE SAME TIME AS THE BELT. IT WAS NOTED THIS TIME, AS IN OTHER TIMES THAT THE BELT WAS TENSIONED TO THE MAX IN ORDER TO PUT THE PULLEY BOLTS IN.

SNIAS	LYC	BELT	BROKEN	02/26/2003	
AS350D	LTS101600A2	704A33690004	HYD PUMP	2003041000073	

(CAN) ON DESCENT FOR THE BASE, THE CAUTION HORN AS WELL AS (HYDRAULIC PRESSURE) LIGHT CAME ON. A/C LANDED WITHOUT INCIDENT. UPON INSPECTION, HYDRAULIC PUMP BELT WAS FOUND BROKEN, LAYING ON THE TRANSMISSION DECK. THE BELT WAS BROKEN AT THE JOINT.

UNIVAR	CONT	RIB	CORRODED	03/17/2003	2529
A2AALON	C90*	41513017R	WING	2003041000048	

LIGHT SURFACE CORROSION FOUND IN BOTH STUB WINGS IN CENTER SECTION. BOTTOM SKINS, UNDER SKIN STIFFENERS, A COUPLE SPOTS ON RIBS, AND BETWEEN REAR SPAR AND REAR RIB P/N 415-1307R INSPECTION WAS IN COMPLIANCE WITH AD 2002-26-02.

UROCOP		INDICATOR	INACCURATE	04/09/2003	19
EC135P1		L316M30C1003	TOT	2003041500092	

NR 1 TOT READS 800 WHEN ENGINE IS COLD. NO HARD CARD AVAILABLE. REPLACED WITH SERVICEABLE UNIT.

UROCOP		MOUNT	LEAKING	03/25/2003	
EC135T1		L633M2010101	TRANSMISSION	2003041200009	

LEAKING. PIN NOT STICKING OUT UNDER A LOAD. REPLACED WITH SERVICEABLE UNIT.

UROCOP		FIREWALL	CRACKED	04/09/2003	1633
EC135T1		L713M1051101	FUSELAGE	2003041500086	

FIREWALL CRACKED. REPLACED WITH SERVICEABLE UNIT.

UROCOP		MODULE	DEFECTIVE	04/07/2003	
EC135T1		41600297006	TRIM ACTUATOR	2003041500110	

AFTER INSTALLING THIS MODULE WE WERE HAVING TRIM ACTUATOR FAILURES AND AUTO PILOT WOULD NOT PASS BIT. REINSTALLED OLD MODULE.

ZLIN	LYC	IMPULSE	LOOSE	03/04/2003	
Z242L	AEIO360A1B6	M3100	MAGNETO	2003041500003	

(CAN) AS A RESULT OF PREVIOUS IMPULSE COUPLING FAILURES, WE IMPLEMENTED AN IMPULSE COUPLING INSPECTION EVERY 100 HRS. UPON INSPECTION OF THIS IMPULSE COUPLING WE FOUND THE HUB VERY LOOSE, BOTH PAWL RIVETS LOOSE, AND THE PAWL GAPS EXCEEDED THE MAXIMUM ALLOWED BY SLICK SB1-98. PAWL GAPS WERE IN EXCESS OF . 170 INCH. MAX ALLOWABLE IS . 150 INCH. HAD THIS IMPULSE COUPLING FAILED IT WOULD HAVE DAMAGED AND CONTAMINATED THE ENGINE.

ZLIN	LYC	SLICK	IMPULSE	LOOSE	02/27/2003	
Z242L	AEIO360A1B6	4372	M3100	MAGNETO	2003041500010	

(CAN) DUE TO PREVIOUS IMPULSE COUPLING FAILURES, WE IMPLEMENTED AN IMPULSE COUPLING INSPECTION EVERY 100 HRS. THIS IMPULSE COUPLING WAS FOUND TO HAVE A LOOSE PAWL RIVET. SLICK SB1-98 WAS CARRIED OUT AND THE PAWL GAPS WERE FOUND TO BE WITHIN LIMITS, AND THE T-155 RIVET GAUGE SHOWED NO WEAR. THE IMPULSE COUPLING WAS REPLACED WITH A NEW ONE.

OMB No. 2120-0003

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

MALFUNCTION OR DEFECT REPORT

OPER. Control No.	
ATA Code	
1. A/C Reg. No.	N-

Enter pertinent data	MANUFACTURER	MODEL/SERIES	SERIAL NUMBER
2. AIRCRAFT			
3. POWERPLANT			
4. PROPELLER			

5. SPECIFIC PART *(of component)* CAUSING TROUBLE

Part Name	MFG. Model or Part No.	Serial No.	Part/Defect Location.

6. APPLIANCE/COMPONENT *(Assembly that includes part)*

Comp/Appl Name	Manufacturer	Model or Part No.	Serial Number

Part TT	Part TSO	Part Condition	7. Date Sub.

8. Comments *(Describe the malfunction or defect and the circumstances under which it occurred. State probable cause and recommendations to prevent recurrence.)*

Optional Information:

Check a box below, if this report is related to an aircraft

☐ Accident; Date _____ ☐ Incident; Date _____

DISTRICT OFFICE | OPERATOR DESIGNATOR

OTHER | COMMUTER | FAA | MFG. | AIR TAXI | MECH. | OPER. | REP.STA.

SUBMITTED BY:

TELEPHONE NUMBER ( ) -

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